



January 2, 2003

Carlton D. Cuffman
U.S. Environmental Protection Agency
Remedial Enforcement Support Section
77 W. Jackson, SR-6J
Chicago, IL 60604-3590

Re: Norwood Marking Systems
2538 Wisconsin Avenue, Downers Grove, IL
Response to CERCLA Section 104(e) Request for Ellsworth Industrial Park Site

Dear Mr. Cuffman:

Please find the enclosed response to the CERCLA Section 104(e) request regarding the Ellsworth Industrial Park Site. The response was prepared in conjunction with Norwood Marking Systems, a division of Illinois Tool Works Inc. (ITW).

You may contact me for any questions or discussion at (847) 657-4843 or kbrown@itw.com.
Thank you for your consideration in this matter.

Sincerely,

Ken Brown, CHMM
Environmental Engineer

Enclosure



**Certification
for
Ellsworth Industrial Park Site
CERCLA Section 104(e) Response
on behalf of
Norwood Marking Systems
2538 Wisconsin Avenue
Downers Grove, IL**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



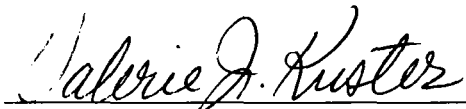
Ken Brown
Environmental Engineer
Illinois Tool Works Inc.

1/2/03

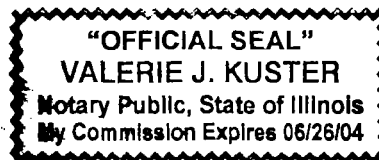
Date

NOTE: Norwood Marking Systems is a division of Illinois Tool Works Inc.

Subscribed and sworn to before a Notary Public in and for the State of Illinois,
this 2nd day of January 2003.



Notary Public



**ELLSWORTH INDUSTRIAL PARK SITE
CERCLA Section 104(e) Response
for
Norwood Marking Systems
2538 Wisconsin Avenue
Downers Grove, IL
January 2, 2003 Submission**

1. Persons consulted in preparation of answers.

Dennis Bourk	Production Supervisor and Safety Director, Norwood Marking Systems
Robert Hitchcock	Operations Manager, Norwood Marking Systems
Elaine LaBuda	Administrative Assistant - Manufacturing, Norwood Marking Systems
Larry Kollins	Former Plant Manager, Norwood Marking Systems

NOTE: Years of employment at Norwood Marking Systems for the persons listed above are approximately as follows:

Dennis Bourk	1974 to present
Robert Hitchcock	1997 to present
Elaine LaBuda	1996 to present
Larry Kollins	1971 to 1997

Britt Wenzel	Manager - Environmental Compliance Management, Mostardi Platt
Claude Mays III	Senior Project Manager, Mostardi Platt

NOTE: Mostardi Platt has provided environmental consulting services to Norwood Marking since the early 1990s.

Ken Brown	Corporate Environmental Engineer, Illinois Tool Works Inc. (ITW)
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NOTE: Norwood Marking Systems is a division of ITW.

2. Documents consulted, examined or referred to.

Environmental compliance management plans
Environmental permits
Material safety data sheets (MSDSs)
Sanitary district reports
Supplier lists
Waste analyses, manifests and reports

NOTE: Copies of reference documents that are not included as Exhibits to specific question responses are included as Exhibit I.

3. Other persons able to provide a more detailed or complete response.

None known.

4. Hazardous materials information.

A hazardous materials list is included as Exhibit A to this response. There is no indication that either of the contaminants of concern (PCE or TCE) has ever been used at the facility.

a. chemical composition, characteristics & physical state

MSDSs are included as Exhibit B to this response.

b. suppliers

A list of suppliers is included as Exhibit C to this response.

c. how used

Hazardous materials are used in various machining and assembly processes involved in the manufacture of hot stamp and thermal transfer printing equipment. Machining processes include cut-off sawing, drilling, electric-discharge machining (EDM), milling, surface grinding and vibratory deburring. Soldering and metal heat treating are conducted on a very limited basis. The cutting, EDM, hydraulic and lubricating oils as well as machining coolant are used with machine tools in the manufacture of various components. Components are machined from ferrous metals and nonferrous metals. The aqueous cleaning solution is used to clean oil and coolant from the machined components. These components were formerly cleaned using mineral spirits.

d. when used

The various oils described in the preceding paragraph have been used since approximately 1970. Mineral spirits solvent was used to clean machined components from about 1970 until aqueous cleaning was implemented in 1999. Metals have been used since approximately 1970.

e. where used

All of the hazardous materials were used inside the building. The only manufacturing residuals that were ever stored outside prior to shipment off-site were metals chips and baghouse dust. All residuals are now stored inside the building.

f. quantities used

aqueous cleaning solution	approximately 100 gallons per year (used since 1999)
EDM oil	approximately 100 gallons per year
hydraulic and lubricating oils	approximately 100 gallons per year
machining coolant	approximately 300 gallons per year
metals	approximately 50,000 pounds per year
mineral spirits	approximately 50 gallons per year (used until 1999)

NOTE: Only hazardous materials with usages in excess of about 10 gallons per year are described above. Usages of the hazardous materials in the Attachment A list with the headings "Office Supplies", "Shop Supplies" and "Building Maintenance" are consumptive and generally less than a few gallons per year of each item.

5. Dates during which property was owned.

The property has been owned by Norwood Marking Systems or successor companies since the site was first developed in 1970. The results of a chain of title search are included as Exhibit D.

6. **Prior owner identification, access control and hazardous substance release information.**
Norwood Marking Systems purchased the property from the Ellsworth Park Development Corporation in 1970 (see Exhibit D - chain of title report). No information was determined regarding access control. There is no indication that a release or threatened release of hazardous substances has ever occurred on the property.
7. **Prior operator identification, access control and hazardous substance release information.**
Norwood Marking Systems was the first company to operate a manufacturing facility at this site.
8. **Copies of local, state and federal environmental permits.**
Copies of environmental permits are included as Exhibit E to this response.
9. **Description of manufacturing processes used at the facility.**
Various machining and assembly processes involved in the manufacture of hot stamp and thermal transfer printing equipment are conducted at the facility. Cut-off sawing, drilling, EDM, milling and surface grinding are employed to create print heads for hot stamp printing equipment. Soldering and metal heat treating are conducted on a very limited basis. A list of chemicals utilized in the manufacturing processes is provided as Exhibit A to this response.
10. **List of chemical substances produced and manufacturing by-products and wastes.**
No chemical substances are produced from manufacturing processes at the facility. The following by-products and wastes result from manufacturing processes at the facility:

By-Products

- ferrous and nonferrous metal shavings
- sludge from settling tank for vibratory deburring rinse water
- surface grinding dust (from small local collectors - central baghouse was removed in 1998)

Wastes

- used aqueous cleaning solution (began generation in 1999)
- used EDM oil, hydraulic oil, lubricating oil and machining coolant
- used mineral spirits (ceased generation in 1999)

Analytical information for the settling tank sludge is included as Exhibit F to this response. The used oils and machining coolant are managed as used oil. The used mineral spirits was D001 hazardous waste. No equipment is used to treat wastes at the facility. Used oils, machining coolant and mineral spirits are collected in 55 gallon drums for pick-up by a disposal company. All of the by-products are collected in 55 gallon drums for pick-up by a recycling company (Acme Refining - Chicago, IL) except for the settling tank sludge which is drummed and picked up by a disposal company.

11. **Production wastes disposed onsite in landfills.**
No production wastes have ever been disposed onsite in landfills.

- 12. Manufacturing processes that utilize rinse water.**
Rinse water is utilized in a vibratory deburring process at the facility. The rinse water passes through a paper filter to remove metal fines before it is recirculated to the deburring process. No rinse water is discharged into navigable waters or the local POTW. The aqueous cleaning units are self-contained and waste aqueous solution is removed directly by a disposal company.
- 13. Map of monitoring wells installed at the facility.**
There are no monitoring wells installed at the facility.
- 14. Map of air monitoring devices installed at the facility.**
There are no air monitoring devices installed at the facility.
- 15. Soil boring collected from the property.**
No soil borings have been collected from the property.
- 16. Above-ground or below-ground storage tanks at the facility.**
There have never been any above-ground or below-ground tanks at the facility. A mineral spirits cold cleaner with a capacity of about 25 gallons was previously located at the facility. Two aqueous parts washers with a capacity of about 20 gallons each are currently used.
- 17. Company's solvent management system at facility prior to 1980.**
Prior to 1980, up to two drums of virgin mineral spirits were stored onsite. Used mineral spirits from a small cold cleaner was placed into the collection drum for used hydraulic and lubricating oil. This combination of used oil and mineral spirits was taken to an off-site location (service station in Downers Grove) and placed into their used oil collection tank. No disposal records were found the pre-1980 time period. The preceding description of waste handling practices is based on the recollections of long-time employees (Dennis Bourk and Larry Kollins).
- 18. Company's waste solvent handling and disposal practices prior to 1980.**
See response to question 17.
- 19. Names of solvent suppliers, years of service and quantities of solvents received.**
See responses to questions 4(b) and 4(f).
- 20. Names of waste solvent handlers, years of service and quantities of waste shipped.**
See Exhibit G to this response for a summary of waste solvent handler information.

21. Drawings or diagrams of sanitary and storm water system at the facility.

No details on the sanitary or storm water system were found on construction drawings for the facility. A diagram that indicates the direction of storm water drainage is provided in the Notice of Intent for storm water general permit coverage that is included in Exhibit E to this response. The facility has been connected to the municipal sanitary sewer system since the property was first developed in 1970.

22. Copy of correspondence between facility and local government regarding discharges into St. Joseph Creek and the municipal sewer.

The facility has had no correspondence with any unit of local government regarding discharges into St. Joseph Creek. The facility submits a "Prohibited Materials Discharge Report" annually to the Downers Grove POTW to certify that no solvents or toxics have been dumped or spilled into the sanitary sewer system during that year. The facility has never experienced any such dumping or spill. Copies of representative discharge reports are included as Exhibit H to this response.

23. Function of floor drains at the facility.

There are several floor drains at the facility that connect to the storm sewer system. However, these drains were sealed in the early 1990s. The floor drains have never received any process water and were simply an artifact of circa 1970 construction practices.

24. Phase I or Phase II investigation information.

There has never been a Phase I or Phase II investigation conducted at this facility.

Hazardous Materials List

			OFFICE SUPPLIES					
				REGULATED MATERIALS		HAZARD		FLASH
NAME	SUPPLIER	TYPE	MATERIAL	SARA	CARCIN.	FORM	REMARKS	POINT
#3525 TONER BLACK	CANON	TONER	COPIER INK			DUST		
MT TONER II	MINOLTA	TONER	COPIER INK			DUST		
MT STRTER II	MINOLTA	TONER	COPIER INK			DUST		
AQUA AMMONIA	MICHLIN	SOLN.		AMMONIA		IRRITANT		
		DUST HAZARD FROM LEAKING CARTRIDGE						
		AMMONIA IS A STRONG IRRITANT						

SHOP SUPPLIES				REGULATED MATERIALS		HAZARD	REMARKS	FLASH POINT
NAME	SUPPLIER	TYPE	MATERIAL	SARA	CARCIN.	FORM		
THREADLOCKER 222	LOCTITE	ANAEROB.	ADHESIVE	METH. ALC.	SACCHAR.	IRRIT/HEALTH	COMBUSTIBLE	200
THREADLOCKER 242	LOCTITE	ANAEROB.	ADHESIVE	METH. ALC.	SACCHAR.	IRRIT/HEALTH	COMBUSTIBLE	200
272 ADHESIVE	LOCTITE	ANAEROB.	ADHESIVE	METH. ALC.	SACCHAR.	IRRIT/HEALTH	COMBUSTIBLE	200
STATIC FREE (LIQ.)	CHEMTRONICS	SOLN	ANTI STAT				SURF. ACTIVE	
LOCQUIC ACTIVATOR	LOCTITE	AEROSOL	CHLOR. SOL.	TRICHLOROETHANE (see MSDS)		HEALTH	REL. CHLO. SOLV.	
TOLE STEEL BLUE	ITW FLUID	SOLVENT	MARKING	ALC./ACET.		FLAMMABLE		53
SP-1138 THINNER	ITW FLUID	SOLVENT	CLEANER	BUTYL ACE.		FLAMMABLE		58
HI-SPOT BL BASE #107	ITW FLUID	SOLVENT	MARKING			COMBUSTIBLE		120
PRESTO BLACK BST4	BIRCHWOOD	SOLN	ACID	SE/CU/HNO3		COR/MUT.	SELINIUM TOX.	
SHEATH PS8	BIRCHWOOD	AEROSOL	PET.BASED	BARIUM CPD.		FLAMMABLE	HC PROPELLANT	
#817	VENUS LAB.	CPD	PHOSP. ACID	PHOSP. ACID		COROSIVE		
SILVER FLUX #601	SUPERIOR FLUX	SOLN	POTAS. SALT				FLUORIDE, BORATE MIX	
#440 ULTRAFINISH	ULTRAMATIC	SOLN					0.8 % ACTIVE	
HINSCLEAN 812	HINSDALE	SOLN					ALKALINE CLEANER	
ELECTROBOND EB100	PACER TECH.	ADHESIVE	ET. CYANO			COMBUSTIBLE		176
SIL. RUBBER CPD C	SCHWERDLTE	RUBBER	SILICONE			DUST	STAMP MATL	
HONING STONES	SUNNEN	CPD	COPM. OXIDE	AL, CU, OXIDES		DUST/FUME	COPM. MISC. OXIDES	
SHOE/MANDRL/SLEVE	SUNNEN	METAL	COMPOSITE	CR, CU CO,MN		DUST/FUME	COMPOSITE	
RF-38	SCAN-PAC	CPD	GRAPH/FBRG			DUST	IF PROCESSING	
EDM-C3	POCO	CPD	GRAPH/CU	CU		DUST/FUME		
NF-409	NATL FRICTION	CPD	OX,BR/RES.	AlO,BRS,GRH		DUST/FUME	COMPOSITE	
SP-350	CRC CHEM.	AEROSOL	SOLVENT			COMBUSTIBLE	CO2 PROP.	140
01976 COMPUND L	TEXACO	RUST PRF.	SOLVENT			COMBUSTIBLE		125
AQUA AMMONIA	MICHLIN	SOLN.		AMMONIA		IRRITANT		
> SACCHARIN IN LOCTITE ADHESIVE IS A SUSPECT CARCINOGEN								
> SELINIUM IN PRESTO BLACK IS A MUTAGEN								

			COMPRESSED GAS					
				REGULATED MATERIALS		HAZARD		FLASH
NAME	SUPPLIER	TYPE	MATERIAL	SARA	CARCIN.	FORM	REMARKS	POINT
OXYGEN	LIQ.CARBONIC	GAS	COMPRESSED			OXIDIZER		
NITROGEN	LIQ.CARBONIC	GAS	COMPRESSED			ASPHYXIAN		
ARGON	LIQ.CARBONIC	GAS	COMPRESSED			ASPHYXIAN		
HYDROGEN	LIQ.CARBONIC	GAS	COMPRESSED			FLAMMABLE		
		> ALL CONTAINERS ARE UNDER HIGH PRESSURE						
		> HYDROGEN WILL READILY FORM EXPLOSIVE MIXTURE WITH AIR						
		> ARGON AND NITROGEN WILL DISPLACE AIR IN AN ENCLOSED SPACE						

BUILDING MAINTAINANCE								
				REGULATED MATERIALS		HAZARD		
NAME	SUPPLIER	TYPE	MATERIAL	SARA	CARCIN.	FORM	REMARKS	FLASH POINT
409 CLEANER	CLOROX	SOLN	OFF. SUPP.	CELLOSOLVE			3%	
SPARKLE GLASS CLNR	FUNK&CO	SOLN	OFF. SUPP.	BUTYL CELL.			10% ACTIVE	
WINDEX	DRACKETT	SOLN	OFF. SUPP.	BUTYL CELL.		COMBUSTIBLE	CONTAIN IPA	124
FANTASTIK CLNR	DOW	SOLN.	OFF. SUPP.	BUTYL CELL.			11% ACTIVE	
PINE OIL (ACE WINDOW)	HERCULES		OFF. SUPP.				COMBUSTIBLE	150
URINAL CLEANER	FRESH PRDT.	FRAGRANCE						
ABC FIRE EXT.	AMEREX	FIRE EXT.	PHOSP.			DUST	SL. IRRITANT	
PINE 64	BALL IND.	SOLN	OFF. SUPP.				4% ACTIVE	
EXPEL	BALL IND.	SOLN	OFF. SUPP.	BUTYL CELL.			20% ACTIVE	
TIME OFF	BALL IND.	FL. POLISH	ACRYLIC	DBP			3%	
SYMPHONY CLEANER	BALL IND.	SOLN	OFF. SUPP.	BUTYL CELL.			5%	
TERMINATOR	BALL IND.	STRIPPER	FLOOR	B.CELL/ET.AM		CORROSIVE	50% ACTIVE	
STERI-SPRAY	BALL IND.	SPRAY	ET. ALC.			COMBUSTIBLE	SCENTED	176
WEATHERBLOK	ICI AMERICA		RODENTICIDE			RAT POISON	IND. INT. BLEED.	
ROUNDUP	MONSANTO	HERB.	WEED KILLER			IRRITANT	CONSULT MSDS	
SELECTIVE HERB.	RIVERDALE	HERB.	WEED KILLER			HEALTH HAZ.	CONSULT MSDS	
SURFLAN A.S.	ELANCO	HERB.	WEED KILLER			IRRITANT	CONSULT MSDS	
LIQ. FERTILIZER	ERNY'S	SOLN.						
BARRICADE 65 WG	SANDOZ	HERB.	WEED KILLER			IRRITANT	CONSULT MSDS	
CHEMLAWN FERT.	MARCO CHEM.	TIME REL.				IRRITANT	APPLIED BY SUPP.	
CHEMLAWN FERT.	MARCO CHEM.	LIQ. FERT.				IRRITANT	APPLIED BY SUPP.	

			METALS					
				REGULATED MATERIALS		HAZARD		FLASH
NAME	SUPPLIER	TYPE	MATERIAL	SARA	CARCIN.	FORM	REMARKS	POINT
LEAD	AMES	METAL	LEAD	PB		DUST/FUME	100% LEAD	
ROSIN CORE SOLDER	SPC	METAL	LEAD ALLOY	PB		DUST/FUME	80% LEAD	
BRASS ALLOY	RYERSON	METAL	BRASS	PB,CU,ZN		DUST/FUME	4% LEAD	
COPPER ALLOY	MORGAN	METAL	BRONZE	PB,CU,NI,ZN		DUST/FUME	> 1% LEAD	
ALUM. CASTING ALLOY	BRUMUND	METAL	ALUM. INGOT	LEAD		DUST/FUME	0.15% LEAD	
TUNSTEN CARBIDE	HERTEL	METAL		COBALT		DUST/FUME	TRACE	
ATOMET 29	QUEBEC METAL	METAL	IRON PWDER			DUST/FUME	TRACE	
ALUM. CASTING	PRECISION	METAL	ALUM INGOT	CR,CU,NI		DUST/FUME	TRACE	
PRS MAG. PLATES	SPECTULITE	METAL	MAG. ALLOY			DUST/FUME	TRACE	
ALUM ALLOY	RYERSON	METAL	ALUM ALLOY	CR, MN,CU		DUST/FUME	TRACE	
STEEL	RYERSON	METAL	STEEL	PB,CR, CU		DUST/FUME	TRACE	
STAINLESS STEEL	RYERSON	METAL	ST. STEEL	CR, CUNBI,MN		DUST/FUME	TRACE	
STEEL	KLOSTER	METAL	STELL TOOL	CR,CO,NI,MN		DUST/FUME	1 - 12 % ALL	
TUNSTEN CARBIDE	KENNAMETAL	METAL	TUNGS.CARB	CO		DUST/FUME	25% CO	
ALUMINUM	SCHWERDLTE	METAL	ALUM.	CU, MN,ZN,CR		DUST/FUME	STAMP MATL(TRACE)	
			> LEAD AND LEAD CONTAINING MATERIALS ARE HIGLY REGULATED MATERIALS					
			IN THE WORK PLACE.					
			AVOID INHILATION AND INGESTION OF THE MATERIAL.					

OIL & GRINDING FLUID								
NAME	SUPPLIER	TYPE	MATERIAL	REGULATED MATERIALS		HAZARD FORM	REMARKS	FLASH POINT
				SARA	CARCIN.			
TUF TAP	EEZ PRODS.	OIL	PET. BASED			MIST/FUME		350
RUSTLUCK EDM-250	BELMONT EQPT.	OIL	PET. BASED			MIST/FUME		244
VELOCITE OIL # 6	MOBIL	OIL	PET. BASED			MIST/FUME	SPINDLE OIL	310
DTE 24	MOBIL	OIL	PET. BASED			MIST/FUME	HYDRAULIC OIL	395
VACMUL 3 A	MOBIL	OIL	PET. BASED			MIST/FUME	METAL PROCESS. OIL	260
VACTRA OIL # 1	MOBIL	OIL	PET. BASED			MIST/FUME	WAY OIL	350
TELLUS(R) OIL 68	SHELL	OIL	PET. BASED			MIST/FUME	HYDRAULIC OIL	370
TELLUS(R) OIL 32	SHELL	OIL	PET. BASED			MIST/FUME	HYDRAULIC OIL	370
TELLUS(R) OIL 10	SHELL	OIL	PET. BASED			MIST/FUME	HYDRAULIC OIL	300
MYSTIK JT-R	CATO OIL	GREASE	PET. BASED	ZN CPD		MIST	IRRITANT	
CLC LUBE HO-149-Z	CLC LUB.	OIL	PET. BASED			MIST/FUME		> 200
CK448A GEAR OIL	SUNNEN	OIL	PET. BASED			MIST/FUME		565
MB-30-55 HONING OIL	SUNNEN	OIL	PET. BASED			MIST/FUME		310
MELQUENCH HS 234	METAL LUBRICT	OIL	PROPIETARY			MIST/FUME		360
MELKUT 291	METAL LUBRICT	OIL	PROPIETARY			MIST/FUME		340
TRIM SOL	MASTER CHEM.	GRD. FL.	PET./SURF.			COMBUSTIBLE	WATER MISC.	305
HINSCOOL 243	HINSDALE	GRD. FL.	SOLN.				WATER BASED	
SUPER AGITENE	GRAYMILLS	SOLVENT	PET.BASED			COMBUSTIBLE		110
Safety Klean <i>6360</i> <i>Aggressive Cleaner</i>								
> AVOID MISTING AND FUMING CONDITION DURING PROCESSING.								

			PLASTIC MATERIAL					
				REGULATED MATERIALS		HAZARD		FLASH
NAME	SUPPLIER	TYPE	MATERIAL	SARA	CARCIN.	FORM	REMARKS	POINT
ACETAL	POLYMER CORP	PLASTIC	ACETAL			DUST	IF PROCESSING	
LEXAN	GE	PLASTIC	POLY CARB.			DUST	IF PROCESSING	
PLEXIGLAS	ROHM & HAAS	PLASTIC	ACRYLIC	M. METHA		DUST/FUME	RES. MONOMER	
DELIN	DUPONT	PLASTIC	ACETAL RES.			DUST	IF PROCESSING	
TEFLON	PLASTIC WORKS	PLASTIC	TFE			DUST	IF PROCESSING	

MATERIAL SAFETY DATA SHEET

Canon U.S.A., Inc.
One Canon Plaza
Lake Success, NY 11042
Telephone: 516-488-6700

24 hr. Emergency Contact
CHEMTREC: 800-424-9300

Date of preparation: 11/85
Date of revision: 12/91

SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: NP-3025/3225/3525/3725 Toner Black
PRODUCT DESCRIPTION: Toner powder for Canon copiers (350g)
ITEM NO: F41-4008-750 , F41-4001
NFPA HMIS RATING: Health: 0, Flammability: 1, Reactivity: 1

SECTION 2 INGREDIENTS

Principal Component(s)	CAS No.	Wt. %	OSHA (PEL) ACGIH (TLV)
Styrene Acrylate Copolymer	25153-46-2	55-60	N/A
Iron Oxide	1317-61-9	40-50	N/A

Manufacturer contact states all other information is proprietary.

N/A = Not Applicable

Concerning carcinogenicity, the ingredients listed above are not listed on the latest NTP Annual Report, IARC Monographs and OSHA regulations.

SECTION 3 PHYSICAL DATA

APPEARANCE AND ODOR:	Fine powder, slight plastic odor.
BOILING POINT (C):	N/A
MELTING POINT:	N/A
VAPOR PRESSURE (mmHg.):	Negligible.
VAPOR DENSITY (AIR=1):	N/A
SOLUBILITY IN WATER:	Negligible.
SPECIFIC GRAVITY (Water=1):	1.4
PERCENT VOLATILE BY VOLUME:	Negligible.
EVAPORATION RATE (BUTYL ACETATE=1):	Negligible.
PH IN CONCENTRATE:	Cannot be determined.
PH IN DILUTION AS USED:	Cannot be determined.

REC'D FEB 01 1994

MINOLTA

MATERIAL SAFETY DATA SHEET

MSDS NO. PPC-002-NJ

DATE PREP. 6/01/92

PAGE 1 of 3

MINOLTA CORPORATION
101 WILLIAMS DRIVE
RAMSEY, NJ 07446

EMERGENCY TEL. NO.

CONTACT YOUR REGIONAL
POISON CONTROL CENTER

INFORMATION TEL. NO.

201-825-4000

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT: MT Toner II

EQUIPMENT NO. EP50, EP270, EP370, EP370Z, EP410Z, EP415Z,
EP425Z, EP450, EP450Z, EP470Z, EP490Z, EP2100,
EP2120, EP2121, EP2151, EP3120, EP3150, EP3170,
EP4210, EP4230, EP4233, EP4300, EP4301, EP4320,
EP4321, EP5400, EP5401, EP5320, EP5420

SECTION 2 - PRODUCT AND COMPONENT HAZARD DATA

INGREDIENT	CAS NO./NJ REG. NO.	OSHA PEL-TWA	ACGIH TLV-TWA	%
Styrene acrylate copolymer	NJ # 361615-5001-P	N.A.P.	N.A.P.	>80
Copper oxide	1317-38-0	N.A.P.	N.A.P.	5-10
Organic pigment	NJ # 361615-5014-P	N.A.P.	N.A.P.	1-5
Carbon black	1333-86-4	3.5mg/m3	3.5mg/m3	1-5
Polypropylene	9003-07-0	N.A.P.	N.A.P.	1-3

As total nuisance dust

15mg/m3

10mg/m3

Toner, as a mixture, is considered a nuisance dust.

HMIS RATING: HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 1

SECTION 3 - EMERGENCY AND FIRST AID

INHALATION: Wash nostrils, rinse mouth.

INGESTION: Dilute stomach contents with several glasses of water.

EYES: Flush with water for 15 minutes.

SKIN: Wash with soap and water.

PRIMARY ROUTE OF ENTRY: Inhalation

SYMPTOMS OF OVEREXPOSURE

ACUTE: Minimal respiratory tract irritation may occur as with
exposure to large amounts of any nontoxic dust. May cause
cough and raise phlegm.

CHRONIC: None.

REC'D FEB 14 1994

MINOLTA

MATERIAL SAFETY DATA SHEET

MSDS NO. PPC-102
DATE PREP. 4/1/91
PAGE 1 of 3

MINOLTA CORPORATION
101 WILLIAMS DRIVE
RAMSEY, NJ 07446

EMERGENCY TEL. NO. CONTACT YOUR REGIONAL
POISON CONTROL CENTER

INFORMATION TEL. NO. 201-825-4000

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT: MT Starter II

EQUIPMENT NO. EP450, EP450Z

SECTION 2 - PRODUCT AND COMPONENT HAZARD DATA

INGREDIENT	CAS NO.	OSHA PEL-TWA	ACGIH TLV-TWA	%
Carrier				>90
Magnetite		N.AP.	N.AP.	
Styrene acrylate copolymer		N.AP.	N.AP.	
Carbon black	1333-86-4	3.5mg/m ³	3.5mg/m ³	
Amorphous silica	7631-86-9	N.AP.	N.AP.	
Toner				<10
Styrene acrylate copolymer		N.AP.	N.AP.	
Carbon black	1333-86-4	3.5mg/m ³	3.5mg/m ³	
As total nuisance dust		15mg/m ³	10mg/m ³	
Starter, as a mixture, is considered a nuisance dust.				

HMIS RATING: HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 1

SECTION 3 - EMERGENCY AND FIRST AID

INHALATION: Wash nostrils, rinse mouth.
INGESTION: Dilute stomach contents with several glasses of water.
EYES: Flush with water for 15 minutes.
SKIN: Wash with soap and water.

PRIMARY ROUTE OF ENTRY: Inhalation

SYMPTOMS OF OVEREXPOSURE

ACUTE: Minimal respiratory tract irritation may occur as with exposure to large amounts of any nontoxic dust. May cause cough and raise phlegm.
CHRONIC: None.

MATERIAL SAFETY DATA SHEET

MSDS Identity number : 1#2#3

MSDS Revision date : November 14, 1991

Signature of Preparer

[Handwritten Signature]

NFPA HAZARD RATING

HEALTH 2

FIRE 0

REACTIVITY 0

SPECIFIC HAZARD COR

Section I - PRODUCT INFORMATION

Manufacturer's Name:

Michlin Diazo Products Corp.

Phone No: (313) 846-5700

10501 Haggerty Street

Dearborn, MI 48126

CHCM-TEL 24 Hr. Emergency No: (800) 255-3924

Common Name:

AQUA AMMONIA

Chemical Name:

AMMONIUM HYDROXIDE SOLUTION

PRODUCT USE :

Diazo developer, fertilizers, household cleaners

Section II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

INGREDIENTS	OSHA	ACGIH	C.A.S. No.	PERCENT
Number 1 Strength				
AMMONIA GAS IN WATER	35(STEL)	35(STEL)	1336-21-6	29.4%
WATER	NONE	NONE	7732-18-5	70.6%
Non-Hazardous Corrosive Inhibitor			Mixture	Trace
Number 2 Strength				
AMMONIA GAS IN WATER	35(STEL)	35(STEL)	1336-21-6	25.5%
WATER	NONE	NONE	7732-18-5	74.5%
Non-Hazardous Corrosive Inhibitor			Mixture	Trace
Number 3 Strength				
AMMONIA GAS IN WATER	35(STEL)	35(STEL)	1336-21-6	17.8%
WATER	NONE	NONE	7732-18-5	82.2%
Non-Hazardous Corrosive Inhibitor			Mixture	Trace

Section III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical State:	Liquid
Odor threshold	<= 5 ppm
Appearance/Odor :	Colorless liquid with pungent irritating odor.
Specific Gravity(H ₂ O=1) :	0.8974 @ 15.5 Degree C
Boiling Point (Deg. C) : 27 C	Vapor Pressure (MM Hg) : 550 @ 20 Deg. C.
Evaporation Rate (Water=1):	No Data
Vapor Pressure:	475 MMHg @ 15.5 Degree C
Percent volatile by volume	No Data
Solubility in water:	Complete
Freezing Point:	Approximately -75 Degree C
pH:	11 - 13
Sensitivity to Mechanical Impact:	N/A
Rate of Burning	Will not burn

REC'D FEB 23 1994

705 North Mountain Road
Newington, Connecticut 06111
Emergency Phone (203) 278-1280
Fax (203) 280-3558



MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION		PRODUCT NO.: 222
PRODUCT NAME:	Small Screw Threadlocker 222	Issued: 1/1/93
ITEM NUMBERS:	22221, 22231, 22241	
PRODUCT TYPE:	Anaerobic	
FORMULA NO.:	Does not apply	

II. COMPOSITION

REC'D FEB 15 1994

Ingredients	CAS No.	Z
Polyglycol Dimethacrylate	25852-47-5	55-60
Polyglycol oleate	9004-96-0	35-40
SACCHARIN	81-07-2	3-5
CUMENE HYDROPEROXIDE*	80-15-9	1-3
METHYL ALCOHOL*	67-56-1	1-3
SILICA, AMORPHOUS TREATED	112945-52-5	1-3
N,N-Dialkyltoluidines	613-48-9	0.1-1
TITANIUM DIOXIDE	13463-67-7	0.1-0.5

* This component is listed as a SARA Section 313 Toxic Chemical.

III. CHEMICAL AND PHYSICAL PROPERTIES

Vapor Pressure:	Less than 5mm at 80°F
Vapor Density:	Not available
Solubility in Water:	Slight
Specific Gravity:	1.05 at 80°F
Boiling Point:	More than 300°F
Volatile Organic Compound (EPA Method 24)	13.2%; 138.6g/l
Evaporation Rate (Ether = 1)	Not available
pH:	Does not apply
Appearance:	Purple liquid
Odor:	Mild

IV. FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point:	More than 200°F	Method: Tag Closed Cup
Estimated NFPA Code:		
Health Hazard:	1	
Fire Hazard:	1	
Reactivity Hazard:	1	
Specific Hazard:	Does not apply	
Estimated HMIS Code:		
Health Hazard:	1	
Flammability Hazard:	1	
Reactivity Hazard:	1	
Personal Protection:	See Section X.	
Explosive Limits:		
(% by volume in air) Lower:	Methanol: 6%	
(% by volume in air) Upper:	Methanol: 26%	
Recommended Extinguishing Agents:	Carbon dioxide, foam, dry chemical	
Hazardous Products Formed by Fire or Thermal Decomp	Irritating organic vapors	
Unusual Fire or Explosion Hazards:	None	
Compressed Gases:	None	
Pressure at Room Temp.:	Does not apply	

V. SPILL OR LEAK AND DISPOSAL PROCEDURES

Steps to be taken in case of spill or leak:	Soak up with an inert absorbent. Store in partly filled, closed container until disposal.
Recommended methods of disposal:	Incinerate following EPA and local regulations.

VI. STORAGE AND HANDLING PROCEDURES

Storage:	Store below 110°F to preserve shelf life.
Handling:	Avoid prolonged skin contact. Keep away from eyes.

VII. SHIPPING REGULATIONS

DOT (49 CFR 172)	
Proper Shipping Name	Unrestricted
Hazard Class or Division	Unrestricted
Identification Number	None
IATA	
Proper Shipping Name	Unrestricted



MATERIAL SAFETY DATA SHEET

705 North Mountain Road
Newington, Connecticut 06111
Emergency Phone (203) 278-1280
Fax (203) 280-3558

I. PRODUCT IDENTIFICATION		PRODUCT NO.: 242
PRODUCT NAME:	Removable Threadlocker 242	Issued: 1/1/93
ITEM NUMBERS:	24205, 24221, 24231, 24241	
PRODUCT TYPE:	Anaerobic	
FORMULA NO.:	Does not apply	

II. COMPOSITION

Ingredients	CAS No.	%
Polyglycol Dimethacrylate	25852-47-5	60-65
Polyglycol oleate	9004-96-0	25-30
SACCHARIN	81-07-2	3-5
CUMENE HYDROPEROXIDE*	80-15-9	1-3
METHYL ALCOHOL*	67-56-1	1-3
SILICA, AMORPHOUS TREATED	112945-52-5	1-3
N,N-Dialkyltoluidines	613-48-9	0.1-1
TITANIUM DIOXIDE	13463-67-7	0.1-0.5

REC'D FEB 15 1994

* This component is listed as a SARA Section 313 Toxic Chemical.

III. CHEMICAL AND PHYSICAL PROPERTIES

Vapor Pressure:	Less than 5mm at 80°F
Vapor Density:	Not available
Solubility in Water:	Slight
Specific Gravity:	1.1 at 75°F
Boiling Point:	More than 300°F
Volatile Organic Compound (EPA Method 24)	13.3%; 146.3 g/l
Evaporation Rate (Ether = 1)	Not available
pH:	Does not apply
Appearance:	Blue liquid
Odor:	Mild

IV. FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point:	More than 200°F	Method: Tag Closed Cup
Estimated NFPA Code:		
Health Hazard:	1	
Fire Hazard:	1	
Reactivity Hazard:	1	
Specific Hazard:	Does not apply	
Estimated HMIS Code:		
Health Hazard:	1	
Flammability Hazard:	1	
Reactivity Hazard:	1	
Personal Protection:	See Section X.	
Explosive Limits:		
(% by volume in air) Lower:	Not available	
(% by volume in air) Upper:	Not available	
Recommended Extinguishing Agents:	Carbon dioxide, foam, dry chemical	
Hazardous Products Formed by Fire or Thermal Decomp	Irritating organic vapors	
Unusual Fire or Explosion Hazards:	None	
Compressed Gases:	None	
Pressure at Room Temp.:	Does not apply	

V. SPILL OR LEAK AND DISPOSAL PROCEDURES

Steps to be taken in case of spill or leak:	Soak up in an inert absorbent. Store in a partly filled, closed container until disposal.
Recommended methods of disposal:	Incinerate following EPA and local regulations.

VI. STORAGE AND HANDLING PROCEDURES

Storage:	Store below 110°F to preserve shelf life.
Handling:	Avoid prolonged skin contact. Keep away from eyes.

VII. SHIPPING REGULATIONS

DOT (49 CFR 172)	
Proper Shipping Name	Unrestricted
Hazard Class or Division	Unrestricted
Identification Number	None
IATA	
Proper Shipping Name	Unrestricted

I. PRODUCT IDENTIFICATION		PRODUCT NO.: 272
PRODUCT NAME:	High Temperature 272 Adhesive/Sealant	Issued: 1/1/93
ITEM NUMBERS:	27240	
PRODUCT TYPE:	Anaerobic	
FORMULA NO.:	LO-508	

II. COMPOSITION

Ingredients	CAS No.	%
Aromatic dimethacrylate ester	24448-20-2	75-80
Maleimide resin	3006-93-7	10-15
CUMENE HYDROPEROXIDE*	80-15-9	1-3
Hydroxyalkyl methacrylate	27813-02-1	1-3
METHYL ALCOHOL*	67-56-1	1-3
SILICA, AMORPHOUS TREATED	112945-52-5	1-3
1-Acetyl-2-phenylhydrazine	114-83-0	0.1-1
N,N-Dialkyltoluidines	613-48-9	0.1-1
MALEIC ACID	110-16-7	0.1-1
SACCHARIN	81-07-2	0.1-1

REC'D FEB 15 1994

* This component is listed as a SARA Section 313 Toxic Chemical.

III. CHEMICAL AND PHYSICAL PROPERTIES

Vapor Pressure:	Less than 5mm at 80°F
Vapor Density:	Not available
Solubility in Water:	Slight
Specific Gravity:	1.11 at 75°F
Boiling Point:	More than 300°F
Volatile Organic Compound (EPA Method 24)	8.1%; 89.9 grams per liter
Evaporation Rate (Ether = 1)	Not available
pH:	Does not apply
Appearance:	Red Liquid
Odor:	Mild

IV. FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point:	More than 200°F	Method: Tag Closed Cup
Estimated NFPA Code:		
Health Hazard:	1	
Fire Hazard:	1	
Reactivity Hazard:	1	
Specific Hazard:	Does not apply	
Estimated HMIS Code:		
Health Hazard:	1	
Flammability Hazard:	1	
Reactivity Hazard:	1	
Personal Protection:	See Section X.	
Explosive Limits:		
(% by volume in air) Lower	6% Methanol	
(% by volume in air) Upper	36% Methanol	
Recommended Extinguishing Agents:	Carbon dioxide, foam, dry chemical	
Hazardous Products Formed by Fire or Thermal Decomp	Irritating organic vapors	
Unusual Fire or Explosion Hazards:	None	
Compressed Gases:	None	
Pressure at Room Temp.:	Does not apply	

V. SPILL OR LEAK AND DISPOSAL PROCEDURES

Steps to be taken in case of spill or leak:	Soak up in an inert absorbent. Store in partly filled, closed container until disposal.
Recommended methods of disposal:	Incinerate following EPA and local regulations.

VI. STORAGE AND HANDLING PROCEDURES

Storage:	Store below 110°F to preserve shelf life.
Handling:	Avoid prolonged skin contact. Keep away from eyes.

VII. SHIPPING REGULATIONS

DOT (49 CFR 172)	
Proper Shipping Name	Unrestricted
Hazard Class or Division	Unrestricted
Identification Number	None

Static Free® (liquid) C3200, C400

IDENTIFICATION

Name: Static Free	Chemical Family: Quaternary Ammonium Salts
CAS Registry No.: Mixture	Formula: Proprietary
Manufacturer: Chemtronics, Inc. 8125 Cobb Center Drive Kennesaw, GA 30144	Medical/Transportation Emergency Phone: 1-800-424-9300 (Chemtrek) (404) 424-4888 (404) 424-4267 (Fax)

PHYSICAL DATA

Boiling Point: 212°F	Melting Point: N/A
Vapor Pressure: 18 mm Hg @ 68°F	Evaporation Rate (Butyl acetate=1): >1
Vapor Density (Air=1): 1 @ 68°F	Appearance: Clear
Solubility in Water: Negligible	Form: Liquid
Specific Gravity (Water=1): 1.00	Color: Light amber
	Odor: Slight solvent

INGREDIENTS

Material(s): Topical Antistat	CAS Registry No.(s): 61791-10-4
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HAZARDOUS REACTIVITY

Stability: Material is stable. However, avoid exposure to strong acids, bases and other reactive materials.

Decomposition or By-products: Under extreme heat small amounts of CO, NO_x and HCl may be evolved.

Incompatibility: Strong acids, bases, other oxidizing chemicals.

Polymerization: Will not occur.

FIRE AND EXPLOSION DATA

Flash Point: None

Method: TOC

Autoignition Temperature: N/A

Flammable Limits in Air, % by Vol.:

Lower: N/A

Upper: N/A

Autodecomposition Temperature: N/A

Fire and Explosion: Decomposition may occur.

Extinguishing Media: Nonflammable

Special Fire Fighting Instructions: None

HEALTH HAZARD INFORMATION

Principal Health Hazards—Routes of Entry:

Inhalation: May cause irritation to the respiratory tract.

Eye: Liquid contact may result in irritation and eye damage.

Ingestion: May cause irritation to the mouth, throat and stomach.

Skin: Liquid contact may result in minor irritation.

Primary skin irritation = 6.29 (25-hour exposure, rabbit)

Exposure Limits:

Material:	TWA (ACGIH):	STEL (ACGIH):	PEL (OSHA):
Topical Antistat	N/A	N/A	N/A

Signs and Symptoms of Over-Exposure:

Inhalation: Over exposure may result in irritation of nasal passages, mouth and throat, with coughing.

Eye: Contact with liquid may result in severe irritation, reddening, conjunctivitis, tearing of the eye and possible corneal damage.

Ingestion: May result in irritation of the linings of the mouth, throat and stomach, with attendant nausea.

Skin: Contact may result in slight irritation and reddening of the skin. Usually no lasting effect.

Medical Conditions Possibly Aggravated by Exposure:

Pre-existing respiratory conditions. (See *Inhalation section*)

First Aid:

Inhalation: Remove to fresh air and call a physician. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficult, give oxygen.

Eye: Immediately flush with water for at least 15 minutes. Contact lenses should be removed if the initial flush doesn't wash them out. Seek immediate medical attention.

Ingestion: DO NOT induce vomiting. Aspirating the material into the lungs can result in chemical pneumonia and lead to pulmonary edema, which is potentially fatal. Give plenty of water. Seek immediate medical attention.

Skin: Flush with water. If irritation occurs or persists, seek medical attention.

Carcinogenicity:

Components are not listed as carcinogens by IARC or NTP. OSHA regulated - no. Toxic - yes; low toxicity. (See *Inhalation and Ingestion sections*)



MATERIAL SAFETY DATA SHEET

705 North Mountain Road
Newington, Connecticut 06111
Emergency Phone (203) 278-1280
Fax (203) 280-3558

I. PRODUCT IDENTIFICATION		PRODUCT NO.: 707
PRODUCT NAME:	Locquic® Activator 707 (Aerosol)	Issued: 1/1/93
ITEM NUMBERS:	70715	
PRODUCT TYPE:	Aerosol Primer	
FORMULA NO.:	Not Applicable	

II. COMPOSITION

REC'D FEB 15 1994

Ingredients	CAS No.	%
ETHANE, 1,1,1-TRICHLORO-*	71-55-6	80-85
Butanal-aniline condensate	9003-37-6	10-15
CARBON DIOXIDE	124-38-9	2-5
tert-BUTYL ALCOHOL*	75-65-0	1-3
METHANE, DIMETHOXY-	109-87-5	1-3

* This component is listed as a SARA Section 313 Toxic Chemical.

III. CHEMICAL AND PHYSICAL PROPERTIES

Vapor Pressure:	Approximately 100 mm at 70°F
Vapor Density:	Approximately 4.5
Solubility in Water:	Slight
Specific Gravity:	1.20 at 80°F
Boiling Point:	Approximately 175°F
Volatile Organic Compound (EPA Method 24)	14.9%
Evaporation Rate (Ether = 1)	Not available
pH:	Not Applicable
Appearance:	Brown liquid
Odor:	Sharp

IV. FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point:	None	Method: Tag Closed Cup
Estimated NFPA Code:		
Health Hazard:	2	
Fire Hazard:	1	
Reactivity Hazard:	0	
Specific Hazard:	Does not apply	
Estimated HMIS Code:		
Health Hazard:	2	
Flammability Hazard:	1	
Reactivity Hazard:	0	
Personal Protection:	See Section X.	
Explosive Limits:		
(% by volume in air) Lower	7% 1,1,1-Trichloroethane	
	2.4% t-Butyl alcohol	
	2.2% Dimethoxymethane	
(% by volume in air) Upper	15% 1,1,1-Trichloroethane	
	8% t-Butyl alcohol	
	13.1% Dimethoxymethane	
Recommended Extinguishing Agents:	Carbon dioxide, Foam, Dry Chemical	
Hazardous Products Formed by Fire or Thermal Decomp	Toxic chlorides	
Unusual Fire or Explosion Hazards:	Cans may rupture in fires.	
Compressed Gases:	Carbon dioxide	
Pressure at Room Temp.:	50 psi	

V. SPILL OR LEAK AND DISPOSAL PROCEDURES

Steps to be taken in case of spill or leak:	Allow to evaporate with good ventilation. Soak up residue in an inert absorbent.
Recommended methods of disposal:	Follow EPA and local regulations for disposal of chlorinated hydrocarbons under pressure.

VI. STORAGE AND HANDLING PROCEDURES

Storage:	Store below 110°F.
Handling:	Avoid prolonged breathing of vapor.

VII. SHIPPING REGULATIONS

DOT (49 CFR 172)	
Proper Shipping Name	Ground: consumer Commodity Air: Consumer Commodity
Hazard Class or Division	Ground: ORM-D

M A T E R I A L S A F E T Y D A T A S H E E T

PRODUCT NAME: TOLE STEEL BLUE DX-100

HMIS CODES: H F R P
2 3 0 B

FORMULA KEY: -8706

FINISHED GOODS: TRANSPARENT LAYOUT FLUID

2 oz. felt tip - 80200 4 oz. B-I-C - 80300

8 oz. B-I-C - 80400 1 pint - 80500

1 quart - 80600 1 gal. - 80700

5 gal. - 80800 55 gal. - 80900

Correction pen - 84900 .5 oz. B-I-C - 80100

REC'D FEB 23 1994

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ITW FLUID PRODUCTS GROUP

ADDRESS : 8501 DELPORT DRIVE
ST. LOUIS, MO 63114

EMERGENCY PHONE : 800-4249300 CHEMTREC DATE PRINTED : 02/01/94

INFORMATION PHONE : 800-443-9536 DATE PREPARED : March 31, 1993

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
ETHANOL	000064-17-5	40 19C	31-50%
TLV:1000 ppm			
* BUTYL ACETATE	000123-86-4	10 20C	31-50%
ACGIH TLV: 150 PPM TWA, 200 PPM STEL			
OSHA PEL: 150 PPM TWA, 200 PPM STEL			
OPROPANOL	000067-63-0	33 20 C	1-5%
PEL/TLV:400 ppm STEL:500 PPM			
NITROCELLULOSE	009004-70-0	NA	1-5%
NONE ESTABLISHED			
* NORMAL BUTYL ALCOHOL, 1-BUTANOL	000071-36-3	5.5 20C	1-5%
ACGIH TLV 50 PPM CEILING, SKIN			
OSHA PEL 50 PPM CEILING, SKIN			
NORMAL PROPYL ACETATE	000109-60-4	40 19C	1-5%
PEL: 1000 ppm			

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 163F - 257F SPECIFIC GRAVITY (H2O=1): 0.84

VAPOR DENSITY: (AIR = 1): >1 EVAPORATION RATE: (BUNAC=1): >1

COMING V.O.C.: 0.27 10/g1 MINERIAL V.O.C.: 0.27 10/g1

SOLUBILITY IN WATER: Appreciable

APPEARANCE AND ODOR: Blue transparent low viscosity liquid with sweet solvent odor

----- SECTION IV - FIRE AND EXPLOSION HAZARD DATA -----

FLASH POINT: 53 F METHOD USED: CC

FLAMMABLE LIMITS IN AIR BY VOLUME LOWER: 1.38 UPPER: 12

EXTINGUISHING MEDIA: Water No, CO2 Yes, Dry chemical Yes, Foam Yes, Alcohol foam No.

SPECIAL FIREFIGHTING PROCEDURES: Fire fighters should wear self contained breathing apparatus in confined areas.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and may travel along ground, or be moved by ventilation and be ignited by ignition source.

----- SECTION V - REACTIVITY DATA -----

STABILITY: Chemically stable.

CONDITIONS TO AVOID: Heat, sparks, and open flames.

M A T E R I A L S A F E T Y D A T A S H E E T

PRODUCT NAME: THINNER AND REMOVER SP-1138

HMIS CODES: H F R P

FORMULA KEY: -8707A

2 4 0 B

FINISHED GOODS: REMOVERS AND THINNERS

16 oz. aerosol - 82038

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ITW FLUID PRODUCTS GROUP

ADDRESS : 8501 DELPORT DRIVE

ST. LOUIS, MO 63114

REC'D FEB 23 1994

EMERGENCY PHONE : 800-4249300 CHEMTREC DATE PRINTED : 02/01/94

INFORMATION PHONE : 800-443-9536 DATE PREPARED : March 31, 1993

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
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ETHANOL	000064-17-5	40 19C	51-70
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TLV:1000 ppm

* BUTYL ACETATE	000123-86-4	10 20C	11-30
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ACGIH TLV: 150 PPM TWA, 200 PPM STEL

OSHA PEL: 150 PPM TWA, 200 PPM STEL

PROPANE	000074-98-6	120 70 F	6-10%
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OSHA TLV 1000 ppm

ISOBUTANE	000075-28-5	50 70 F	6-10%
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OSHA TLV 1000 ppm

NORMAL PROPYL ACETATE	000109-60-4	40 19C	1-5%
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PEL: 1000 ppm

ISOPROPANOL	000067-63-0	33 20 C	1-5%
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PEL/TLV:400 ppm STEL:500 PPM

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 10 F - 257F SPECIFIC GRAVITY (H2O=1): 0.84

VAPOR DENSITY: (Air = 1): >1 EVAPORATION RATE: (BuAc=1): >1

COATING V.O.C.: 7.01 lb/gl MATERIAL V.O.C.: 7.01 lb/gl

SOLUBILITY IN WATER: Appreciable

APPEARANCE AND ODOR: Colorless transparent low viscosity liquid with sweet solvent odor

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: -156 F METHOD USED: OC

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1.38 UPPER: 12

EXTINGUISHING MEDIA: Water No, CO2 Yes, Dry chemical Yes, Foam Yes, Alcohol foam No.

SPECIAL FIREFIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus in confined areas.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and may travel long ground, or be moved by ventilation and be ignited by ignition source.

===== SECTION V - REACTIVITY DATA =====

STABILITY: Chemically stable.

CONDITIONS TO AVOID: Heat, sparks, and open flames.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: High concentrations of vapors

M A T E R I A L S A F E T Y D A T A S H E E T

PRODUCT NAME: HI-SPOT BLUE BASE #107
FORMULA KEY: -8716

HMIS CODES: H F R P
1 1 1 B

FINISHED GOODS: MARKING PRODUCTS
.11 oz. tube - 83107 .22 oz. tube - 83207
.55 oz. tube - 83307 14 oz. can - 87507
blue low halogen .55 oz. tube - 83399

REC'D FEB 23 1994

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ITW FLUID PRODUCTS GROUP
ADDRESS : 8501 DELPORT DRIVE
ST. LOUIS, MO 63114

EMERGENCY PHONE : 800-4249300 CHEMTREC DATE PRINTED : 02/01/94
INFORMATION PHONE : 800-443-9536 DATE PREPARED : March 31, 1993

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
4,4-DIMETHYLOXAZOLIDINE	051200-87-4	100 70	11-30%

NONE ESTABLISHED

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 99 C - 212 F SPECIFIC GRAVITY (H2O=1): 0.95
VAPOR DENSITY: (Air = 1): >1 EVAPORATION RATE: (BuAc=1): <1
RELATING V.O.C.: 0.00 lb/gal MATERIAL V.O.C.: 0.00 lb/gal

SOLUBILITY IN WATER: Insoluble

APPEARANCE AND ODOR: Blue opaque paste like solid with petroleum oil odor.

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: 120 F METHOD USED: TCC
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: n/a UPPER: n/a
EXTINGUISHING MEDIA: Water No, CO2 Yes, Dry chemical Yes, Foam Yes, Alcohol foam No.

SPECIAL FIREFIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus in confined areas.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

===== SECTION V - REACTIVITY DATA =====

STABILITY: Chemically stable.

CONDITIONS TO AVOID: None

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: High concentrations of vapors may produce irritation of the respiratory tract, headache, dizziness, and nausea.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Slight irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Slight irritant.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: No data.

HEALTH HAZARDS (ACUTE AND CHRONIC):

Acute: Slight irritation.

Chronic: Effects are not known.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

ACGIH CARCINOGENICITY: No

TOXICITY DATA:

TRANSPORTATION EMERGENCY NUMBER: CHEMTREC 800-424-9300 U.S. & CANADA
202-483-7616 INTERNATIONAL

BIRCHWOOD LABORATORIES, INC.
MATERIAL SAFETY DATA SHEET

The data provided here is for hazard communication to our employees, our customers and their employees, and authorized regulatory agencies. For the intended purpose, this MSDS may be duplicated or the data transcribed to an alternative form.

NOTE: The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Birchwood Laboratories, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular period. Accordingly, Birchwood Laboratories, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information. NO REPRESENTATIONS, OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER TO WHICH THE INFORMATION REFERS.

The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.

SECTION I

PRODUCT NAME: PRESTO® BLACK BST4 ITEM NUMBER: 5300--

MANUFACTURED BY: Birchwood Casey
Division of BIRCHWOOD LABORATORIES, INCORPORATED
7900 Fuller Road
Eden Prairie, MN 55344
Information Telephone Number: 612-937-7940

D-U-N-S: 096488432

CHEMICAL FAMILY: Dilute Aqueous Acid CHEMICAL FORMULA: N/A (Mixture)

NATIONAL FIRE PROTECTION ASSOCIATION CODES:
NFPA HEALTH = 2 FLAMMABILITY = 0
REACTIVITY = 0

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM:
HMIS HEALTH = 2 FLAMMABILITY = 0
REACTIVITY = 0 PERSONAL PROTECTION = C

DOT HAZARDOUS MATERIALS DESCRIPTION AND PROPER SHIPPING NAME (49 CFR 172.101):
Corrosive Liquid NOS UN1760/IMCO Class 8

DOT HAZARD CLASS (49 CFR 172.101):
Corrosive Material

REC'D MAR 08 1994

MATERIAL SAFETY DATA SHEET

EMERGENCY TRANSPORTATION NUMBER: 1-800-424-9300

SECTION 1 - IDENTIFICATION :

Product: SHEATH PS8 - AEROSOL

Chemical Family: Mixture

Chemical Formula: NA

Chemical Trade Name, synonyms: NA

Distributed by: Birchwood Laboratories
7900 Fuller Road
Eden Prairie, MN. 55344
Telephone: 612-937-7940

MSDS#: 91111

Date: 4-29-91

Prepared by IKI: Derek J. Bemis

SECTION 2 - INGREDIENTS :

<u>CAS REG #</u>	<u>NAME</u>	<u>PEL/TLV, SOURCE</u>
106-97-8	Butane	800 ppm, ACGIH
74-98-6	Propane	1000 ppm, OSHA
64742-48-9	Mineral Spirits	500 ppm, OSHA for Stoddard Solvent
Not Avail.	* Heavy petroleum oxygenates, 5 mg/m3 as mist, barium-neutralized mixture. OSHA The percentage of Barium in this product is less than 0.6%	
8012-95-1	Mineral Oil	5 mg/m3, OSHA
107-98-2	Propylene Glycol mono- methyl ether	100 ppm, ACGIH

* **NOTE:** This chemical is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372.

REC'D MAR 08 1994

Material Safety Data Sheet

May be used to Comply with
OSHA's Hazard Communication Standard 29 CFR 1910.
Standard must be consulted for specific requirements

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form) Form Approved OME

7411714

NO. 2

Identity (As Used On Label and List)

617

Unlab

NOTE: Blank spaces are not permitted. If any item is not applicable, or no
information is available, the space must be marked to indicate that.

Section I—Manufacturer's Name

(Address, Street, City, State, & Zip Code)

Venus Laboratories Inc

855 Lively Blvd

Wood Dale IL 60191

Emergency Telephone Number

Telephone Number for Information

Date Prepared

6-12-86

Section II—Hazardous Ingredients / Identity Information

Hazardous Components (Specify Chemical Identity, Common Names)

OSHA PEL

ACGIH TLV

Other Limits
Recommended

% (opti

Phosphoric Acid CAS #7664-38-2

1Mg/M3

1Mg/M3

NA

Didecyl Dimethyl Ammonium Chloride CAS #7173-51-5

NA

NA

NA

Section III—Physical Chemical Characteristics

Boiling Point	NA	Specific Gravity (WATER =1)	NA
Vapor Pressure	NA	Melting Point	NA
Vapor Density	NA	Evaporation Rate	NA
Solubility in Water	Complete		
Appearance and Odor	Pink solid with spice odor		

Section IV—Fire and Explosion Hazard Data

Flash Point	Flammable Limits	LEL	UEL
NA	NA	NA	NA

Extinguishing Media

NA

Special Fire Fighting Procedures

None

Unusual Fire and Explosion Hazards

None

Material Safety Data Sheet

To the Purchaser: This MSDS contains important environmental, health and toxicology information for your employees who have ordered this product. Please be sure this information is given to them. If you resell this product, a copy of the MSDS should be given to the buyer.

Manufacturer's Name
SUPERIOR FLUX & MFG. CO.

Address
95 ALPHA PARK.

Signature of Person
Responsible for Preparation

Bruce Howarth

QUICK IDENTIFIER (in Plant Common Name)

SUPERIOR NO. 601 **No. 92**

Issue Date
8/24/90

Emergency
Telephone No. **(216) 461-3315**

Other
Information
Calls
SAME

Date
Prepared
8/24/90

SECTION 1 - IDENTITY

Common Name: (used on label)
(Trade Name & Synonyms) **SILVER SOLDER FLUX NO. 601**

Case No. **SEE BELOW**

Chemical
Name
NA

Chemical
Family
SILVER BRAZING PASTE FLUX

Formula
SEE BELOW

SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common name(s))	CAS#	% BY WT.	Threshold Limit Value (mg/m ³)
POTASSIUM BIFLUORIDE	7789-29-9	10-30%	2.5 MG/M3
POTASSIUM FLUOBORATE	14075-53-7	5-20%	2.5 MG/M3
*POTASSIUM TETRABORATE	1332-77-0	15-25%	NA
POTASSIUM FLUORIDE	7789-23-3	5-15%	2.5 MG/M3
*BORIC ACID	10043-35-3	25-40%	NA
*WATER	7732-18-5	15-35%	NA

*NON-HAZARDOUS SUBSTANCE

INFORMATION FOR MIXTURES IS BASED ON CONSTITUENT MSDS WHICH ARE AVAILABLE UPON REQUEST. (Minus Proprietary Trade Names)

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point	NA	Specific Gravity (H ₂ O = 1)	1.6	Vapor Pressure (mm Hg)	NA
Percent Volatile by Volume (%)	30	Vapor Density (Air = 1)	NA	Evaporation Rate (WATER = 1)	0.3
Solubility in Water	MODERATE	Reactivity in Water	NONE		
Appearance and Odor	WHITE ODORLESS PASTE				

Flash Point	NONE	Flammable Limits in Air % by Volume	Lower NA Upper NA	Extinguisher Media	NOT NEEDED	Auto-ignition Temperature	NONE
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Special Fire Fighting Procedures
NORMAL CAUTION WHEN DEALING WITH FLUX CHEMICALS

Unusual Fire and Explosion Hazards
WILL RELEASE HYDROFLUORIC ACID AND BORON TRIFLUORIDE FUMES UPON DECOMPOSITION

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072



IDENTITY (As Used on Label and List)
#44Q Ultrafinish Compound

Note: Blank spaces are not permitted. If any item is not applicable, or no
information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name
Ultramatic Equipment Company

Emergency Telephone Number
(708) 543-4565

Address (Number, Street, City, State, and ZIP Code)
848 Westgate Drive

Telephone Number for Information
(708) 543-4565

Addison, IL 60101

John Kliczko

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))

NTA Acid

Vibratory
Depurging
Compound
Methylotriacetic
Acid

% (optional)

less than

No flammables

finishing medium

works on plastic

? just solve it when cleaning up

Section III — Physical/Chemical Characteristics

Boiling Point	215°F	Specific Gravity (H ₂ O = 1)	1.01
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	100%		

Appearance and Odor clear liquid with no odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	None	Flammable Limits	N/A	LEL	UEL
Extinguishing Media	N/A				
Special Fire Fighting Procedures	N/A				

Unusual Fire and Explosion Hazards N/A



HINSDALE CHEMICALS INC.

MATERIAL SAFETY DATA SHEET

SECTION I

HINSDALE CHEMICALS, INC.
1450 AMHERST COURT JOLIET, IL 60433
EMERGENCY TELEPHONE NUMBER: 1 (815) 723-3451

TRADE NAME: HINSCLEAN 612

CAS #

CHEMICAL FAMILY: Liquid Alkaline Cleaner

Date: 070991

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENTS	PERCENT	TLV
Aqueous Solution of Alkaline Salts		

SECTION III - PHYSICAL DATA

APPEARANCE & ODOR	Clear off-white liquid, mild odor
SPECIFIC GRAVITY	1.081
BOILING POINT	212 F.
SOLUBILITY IN WATER	Complete

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT: NONE
EXTINGUISHING MEDIA: NONE NECESSARY - WATER BASED SOLUTION
SPECIAL FIRE FIGHTING PROCEDURES: NONE
UNUSUAL FIRE & EXPLOSION HAZARDS: NONE

SECTION V - HEALTH HAZARD

HEALTH HAZARD: MAY CAUSE IRRITATION TO THE SKIN.

EMERGENCY AND FIRST AID PROCEDURES: Flush eyes with fresh water immediately and seek medical attention.

SECTION VI - REACTIVITY

STABILITY: STABLE
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VII - SPILL, LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: FLUSH WITH WATER INTO APPROVED DISPOSAL SYSTEM.
DISPOSAL METHOD: TREAT AS ALKALINE DETERGENT SOLUTION. DISPOSE OF IN ACCORDANCE WITH LOCAL AND CORPORATE REGULATIONS.
STATE, AND FEDERAL REGULATIONS.

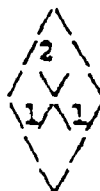
MATERIAL SAFETY DATA SHEET

**HAZARD
RATING**

REC'D FEB 1 1994

DATE: 1/02/91

PACER TECHNOLOGY
9420 Santa Anita Avenue
Rancho Cucamonga, CA 91730



For Chemical Emergencies Only:
U.S. and Canada (800) 424-9300
Int'l & Wash D.C. (202) 483-7616 **COLLECT**
Telephone Number for Information:
(714) 987-0550

PRODUCTION IDENTIFICATION:

PACER TECH: ELECTROBOND EB 100

HAZARDOUS INGREDIENTS/IDENTITY INFORMATION:

Hazardous Components
(Common Names, Specific Chemical Identity)

**OSHA
PEL**

**ACGIH
TLV**

**Other Limits
Recommended**

**%
Opti**

CAS#7085-65-0 ETHYL-2-CYANOACRYLATE

NE

NE

2-5ppm

PHYSICAL/CHEMICAL CHARACTERISTICS:

Boiling Point: @ 6mm Hg. 149 F

Vapor Density (Air = 1): nil-NE

Vapor Pressure (mm Hg.): @ 20 C. 1

Solubility in Water:

Specific Gravity (H2O = 1):

1.05

Melting Point:

NE

Evaporation Rate (Butyl Acetate = 1):

nil-NE

Insoluble as material reacts to hardened mass for non-hazardous waste.

Appearance and Odor:

Transparent water-white to straw colored liquid with stimulative odor.

FIRE AND EXPLOSION HAZARD DATA:

Flash Point (Method Used):

Flammable Limits:

**LEL: Non
NE**

**UEL: Non
NE**

TCC = 176 F.

Extinguishing Media:

Flush with large amounts of water or dry chemical extinguisher.

Special Fire Fighting Procedures:

Fumes may be irritating if not burning and require air supply system with goggles while applying large amounts of water or dry chemical extinguisher.

Unusual Fire and Explosion Hazards:

None. Combustible requiring the above procedures.

FROM

Schwerdtle

Section 1

THE SCHWERDTLE STAMP COMPANY
image makers since 1879
166 ELM STREET • P.O. BOX 1461 • BRIDGEPORT, CONNECTICUT 06601
FORWARDING AND RETURN POSTAGE GUARANTEED

MAR 3 1994

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet is principally directed to managerial, safety, hygiene and medical personnel. The description of physical, chemical and toxicological properties and handling advice is based on experimental results and past experience. It is intended as a starting point for the development of health and safety procedures.

This Material Safety Data Sheet (MSDS) meets the requirements of the Federal OSHA Hazard Communications Standard (29 CFR 1910.1200).

SECTION I. PRODUCT IDENTIFICATION

MATERIAL NAME: SILICONE RUBBER COMPOUND C
CHEMICAL FAMILY: Formulated product
CHEMICAL NAME AND SYNONYMS: Not applicable
FORMULA: Not applicable
COMPOSITION: The specific chemical identity of the ingredients of this formulation is considered a trade secret.

SECTION II. HAZARDOUS INGREDIENTS

CAS NUMBER	CHEMICAL NAME	PERCENT	TLV	PEL
NONE				

SECTION III. PHYSICAL DATA

BOILING POINT, degrees F:	Not applicable
VAPOR PRESSURE, 68 deg. F mm. Hg:	Nil
VAPOR DENSITY (Air = 1):	Not applicable
SOLUBILITY IN WATER:	Negligible
APPEARANCE AND ODOR:	Brown, odorless solid
SPECIFIC GRAVITY (Water = 1):	1.70
PERCENT VOLATILE (by volume):	Nil
EVAPORATION RATE (Ether = 1):	Nil
FLASH POINT, degrees F:	Not applicable
(Method used)	Not applicable
FLAMMABLE LIMITS IN AIR, % LEL:	Not applicable
UEL:	Not applicable

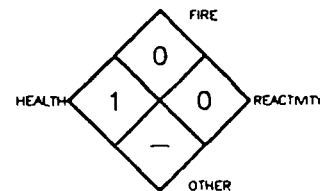
SECTION IV. FIRE HAZARDS

FLASH POINT (method used):	Closed cup: above 212F/100C
AUTO-IGNITION:	N.D.
FLAMMABILITY LIMITS IN AIR:	Lower: N.D. Upper: N.D.
EXTINGUISHING MEDIA:	Water, foam, CO2, dry chem.
SPECIAL FIRE FIGHTING PROCEDURES:	Self-contained breathing



MATERIAL SAFETY DATA SHEET

MSDS 02-7
MA. TRADE SECRET REGISTRATION NUMBER 99-165-002



SECTION 1 NAME AND PRODUCT

MANUFACTURER'S NAME AND ADDRESS:

SUNNEN PRODUCTS COMPANY
7910 Manchester Ave.
St. Louis, MO 63143
U.S.A.

CONTACT:
EMERGENCY PHONE NO:
APPROVED BY:
TITLE:
DATE:

Chuck Korn
314-781-2105
Terry Heller
Manager, Materials R&D
July 4, 1992

TRADE NAME, COMMON NAME OR SPECIFICATION: Sunnen Honing Stones: A, J and C Abrasive (Example: K10-A57 or P28-C07), or AN, AHU, CR, EEU, EAU, EMN, EMU, EKN, EHN, EKV, EHU, EUA, EUG, HB, JN, JHU, JUA, JUG, KL, LBN, LG, LH, LJ, ML, PL, RY, RYY, SC, SL, SYV, SN, UL, XB, XHB and XSC Prefix (Exm: JHU-625), TS-125 & XB25. Also A, N, E, F, J, G, H and K Sunnen made abrasive for Non-Sunnen Machines (Example: K01-3-12-12-192-AC.)
CHEMICAL FAMILY: Mixture. Vitrified or Superabrasive Honing Stone that may contain fillers and organic binders mounted on a zinc or zinc coated steel holder.

SECTION 2 INGREDIENTS/IDENTITY (PER 29 CFR 1910.1200(g))

CHEMICAL NAME OF COMPONENTS	CAS NO.	MAX Wt%	OSHA Z1A 8 HR TWA	OSHA Z1A STEL mg./cu.m.	ACGIH TWA	CARCINOGENIC
aluminum oxide (alundum)	1344-28-1	55	10 dust/5 respirable	NONE	10	N
aluminum (metal)	7429-90-5	5	15 dust/5 respirable	NONE	10	N
boron oxide (boron oxide)	1303-86-2	5	10 dust/5 respirable	NONE	10	N
calcium oxide (lime)	1305-78-8	5	5	NONE	2	N
copper (metal) as dust/mist	7440-50-8	5	1	NONE	1	N
copper (metal) as fume	7440-50-8	-	.1	NONE	0.2	N
fibrous glass (fiberglass) as dust	NONE	10	15 dust/5 respirable	NONE	10	N
fluorides (fluorides) as fluorine	NONE	5	2	NONE	2.5	N
manganese (metal)	7439-96-5	1	5 dust/1 fume	3 fume	5 dust/1 fume	N
silicon carbide (crystolon)	409-21-2	55	10 dust/5 respirable	NONE	10	N
silica, fused (silicon dioxide)	60676-86-0	5	.1 respirable dust	NONE	0.1	N(1)
tin (metal) as inorganic except oxide	7440-31-5	5	2	NONE	2	N

THIS MIXTURE CONTAINS TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372. FOR FURTHER SAFETY AND HEALTH INFORMATION REGARDING THE COMPOSITION OF THIS MATERIAL CONTACT SUNNEN PRODUCTS. THE EXACT COMPOSITION OF THIS MATERIAL IS BEING WITHHELD AS A TRADE SECRET OF SUNNEN PRODUCTS COMPANY. (1) Airborne particles of respirable size of Crystalline Silica are known to the state of California to cause cancer.

These mixture ingredients are cited on the following lists:

Name	CAS	Citations
ALUMINUM OXIDE	1344-28-1	4,9,13,16,17
ALUMINUM	7429-90-5	4,5,8,9,10,11,12,13,14,15,17,18,21,22,23
BORON OXIDE	1303-86-2	2,4,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
CALCIUM OXIDE	1305-78-8	2,4,7,9,10,13,16,17
COPPER	7440-50-8	2,4,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
GLASS-FIBROUS/DUST	NONE	4,9,10,13,16,17
FLUORIDES (as F)	NONE	2,4,13,16,17
MANGANESE	7439-96-5	2,4,8,10,11,12,13,14,15,16,17,18,19,20,21,22,23
SILICON DIOXIDE	60676-86-0	2,4,9,10,11,12,13,14,15,16,17,18,20,21,22,23
SILICON CARBIDE	409-21-2	4,9,13,16,17,22
TIN	7440-31-5	2,4,9,10,11,12,13,15,16,17,18,21,22,23
ZINC	7440-66-6	8,9,10,13,18,21,22

1=IARC 2=OSHA 3=NTP 4=ACGIH 5=NTPA49 6=NTPA325M 7=DOT HMT 49CFR172.101 8=EPA SARA III 9=RTECS 10=MA RTK 11=AK RTK 12=CA RTK 13=FL RTK 14=IL RTK 15=ME RTK 16=MN RTK 17=NH RTK 18=NJ RTK 19=Cincinnati, OH RTK 20=Norwood, OH RTK 21=PA RTK 22=RI RTK 23=WV RTK

REC'D FEB 01 1994

NFPA DESIGNATION 704

MATERIAL SAFETY DATA SHEET

HAZARD RATING - HEALTH 1 -
 4=Extreme
 3=High - FIRE 0 -
 2=Moderate
 1=Slight - REACTIVITY 0 -
 0=Insignificant
 - SPECIFIC HAZARD NONE -

SECTION 1 NAME AND PRODUCT

MANUFACTURER'S NAME: SUNNEN PRODUCTS COMPANY CONTACT: Chuck Korn
 ADDRESS: 7910 Manchester Ave. EMERGENCY PHONE NO: 314-781-2105
 St. Louis, Mo. 63143 APPROVED BY: Terry Heller
 United States of America TITLE: Manager, Materials R/D
 DATE: May 1, 1990

TRADE NAME, COMMON NAME OR SPECIFICATION:

Guide Shoe: **STEEL:**UA-C, UA-CH, UB-C, UB-CH, UC-C, UC-CH, LA-C, LA-CH, LB-C, LB-CH, LC-C, LC-CH,
 VA-C, VA-CH, VB-C, VB-CH, PB-H, PC-H, PD-H, PE-H, PF-H.
BRONZE:UA-B, UB-B, UC-B, UD-B, UE-B, LA-B, LB-B, LC-B, VA-B, VB-B, WB-B, WC-B, WD-B, WE-B, WF-B,
 WG-B, SC-B, SD-B, PB-B, PC-B, PD-B, PE-B, PF-B, PG-B, PH-B, CK-, CR- or CV-.
ZINC ALLOY:WB-D, WC-D, WD-D, WE-D, WF-D, WG-D.
Honing Mandrel: **STEEL:**LH, LJ, RYY, SY, ML, ALR or AS, AH, BS, BH, CS, or CH suffix. (Example: K5-150CS)
BRONZE:AB, BB or CB, suffix. (Example: K5-150CB)
Truing Sleeve: **STEEL:**S or ST Prefix. (Example: S-120 or ST-744)

SECTION 2 HAZARDOUS INGREDIENTS/IDENTITY (PER 29 C.F.R. 1910.1200(g))

CHEMICAL AND (COMMON)	%COMPOSITION			CAS	OSHA	OSHA	ACGIH	CARCINOGENIC
NAME OF COMPONENTS	STEEL	BRONZE	ZINC	NO.	TWA	STEL	TWA	
			ALLOY		Z1-A	Z1-A		
					mg/cu m			
aluminum (metal)	<1	7-13	3-7	7429-90-5	Total Dust 15/Respirable 5	NONE	10	N
chromium (metal)	<5	<1	<1	7440-47-3	1	NONE	.5	N (1)
cobalt (metal) as dust/fume	<1	<2	<1	7440-48-4	.05	NONE	.05	N
copper (metal) as fume	<1	70-90	<2	7440-50-8	.1	NONE	.2	N
copper (metal) as dust/mist					1.0	NONE	1	N
manganese (metal) as fume	<2	<4	<1	7439-96-5	1	3	5 dust/1 fume	N
manganese (metal) as dust					OSHA Ceiling (dust) 5			
nickel (metal)	<1	<1	<1	7440-02-0	1	NONE	.05	Y
nickel (metal) as soluble compounds					.1	NONE	.05	Y
silicon (metal)	<1	<4	<1	7440-21-3	Total Dust 10/Respirable 5	NONE	5 dust	N

(1)I.A.R.C. & N.T.P. REPORT THAT ALL COMPOUNDS CONTAINING CHROMIUM ARE POTENTIALLY CARCINOGENIC. FOR FURTHER SAFETY AND HEALTH INFORMATION REGARDING THE COMPOSITION OF THIS MATERIAL CONTACT SUNNEN PRODUCTS. This mixture contains toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

These mixture ingredients are cited on the following lists:

NAME	CAS	CITATIONS
Aluminum	7429-90-5	4,5,8,10,11,12,13,14,15,17,18,21,22,23
Chromium	7440-47-3	1,2,3,4,8,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Cobalt	7440-48-4	2,4,8,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Copper	7440-50-8	2,4,8,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Manganese	7439-96-5	2,4,8,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Nickel	7440-02-0	1,2,3,4,5,7,8,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Silicon	7440-21-3	16,17,21,22,23
Zinc	7440-66-6	8,9,10,13,18,21,22

1=IARC 2=OSHA 3=NTP 4=ACGIH 5=NFPA49 6=NFPA325H 7=DOT HMT 49CFR172.101 8=EPA SARA III 9=RTECS 10=MA RTK 11=AK RTK
 *2=CA RTK 13=FL RTK 14=IL RTK 15=ME RTK 16=MN RTK 17=NH RTK 18=NJ RTK 19=Cincinnati, Ohio RTK 20=Norwood, Ohio RTK
 .=PA RTK 22=RI RTK 23=WV RTK

REC'D FEB 01 1994



6090K
11/25/86

MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200.
Standard must be consulted for specific requirements.

No.

223

IDENTITY (As Used on Label and List)

RF-12, RF-28-3C, RF-36, RF-38-28, RF-38, RF-41, RF-42, RF-44, RF-53, RF-54, RF-59, RF-87-1, RF-425

SECTION I

Manufacturer's Name: Scan-Pac Mfg., Inc.

Address: 9950 North Port Washington Road
Mequon, WI 53092

Emergency Telephone Number: 414 241-3891

Telephone Number for information: 414 241-3891

Date Prepared: April 28, 1986

SECTION II - Hazardous Ingredients/Identity Information^{2*}

Hazardous Components

<u>Common Name</u>	<u>Chemical Name</u>	<u>C.A.S. No.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other Limits Recommended</u>
Fiberglass	Fibrous Glass	65997-17-3	15.0 mg/M ³	10.0 mg/M ³	3 x 10 ⁶ fibers/M ³ (NIOSH)
Graphite	Graphite (Natural)	7782-42-5	15.0 mgpcf	2.5 mg/M ³	NK/NA
Carbon Black	Carbon	13333-86-4	3.5 mg/M ³	3.5 mg/M ³	NK/NA
Autoclaved Lime	Lime, Dolomite, Hydrated	1305-78-8	N/A	5.0 mg/M ³	NK/NA
Mineral Fiber	Mineral Wool Fiber	65996-69-2	15.0 mg/M ³	10.0 mg/M ³	NK/NA

SECTION III - Physical / Chemical Characteristics

Boiling Point: NAP Specific Gravity: (H₂O-1) 1.8 to 2.6
Vapor Pressure (mm Hg.): NAP Melting Point: NK/NA
Vapor Density (Air - 1): NAP Evaporation Rate (Butyl Acetate-1): 0
Solubility in Water: NO
Appearance and Odor: various colors, including green, brown & black, rigid, hard & no odor

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used: NK/NA Flammable limits: NK/NA LEL NK/NA UEL NK/NA
Extinguishing Media: Water,
Special Fire Fighting Procedures: NK/NA
Unusual Fire and Explosion Hazards: NK/NA

EDM-C3

Unocal Corporation
1201 West 5th Street
Los Angeles, California 90017

REC'D FEB 14 1994

Product Name: POCO GRAPHITE SYNTHETIC GRAPHITE - COPPER IMPREGNATED:GRADE Page 1
Product Code No: NONE Issue Date: 11/01/91
Status: FINAL

Responsible Party:

POCO GRAPHITE, INC.
UNION OIL COMPANY OF CALIFORNIA
1601 SOUTH STATE STREET
DECATUR, TEXAS 76234

CONTACT FOR FURTHER INFORMATION:
MSDS COORDINATOR, L.D. FIEL 817-627-2121, X-289

Transportation Emergencies:

CHEMTREC
(800) 424-9300 Cont. U.S.
(202) 483-7616 (Collect)
from Alaska & Hawaii
Health Emergencies:
LOS ANGELES POISON
CONTROL CENTER (24 hrs)
(800) 356-3129

PRODUCT IDENTIFICATION

PRODUCT NAME: POCO GRAPHITE SYNTHETIC GRAPHITE - COPPER IMPREGNATED:GRADE

GENERIC NAME: GRAPHITE

CHEMICAL FAMILY: CARBON

DOT PROPER

SHIPPING NAME: NOT APPLICABLE

ID NUMBER: NONE

DOT HAZARD

CLASSIFICATION: NOT REGULATED

PRECAUTIONARY WARNING

AVOID CONTACT WITH EYES. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. WASH THOROUGHLY AFTER HANDLING.

SECTION I - COMPONENTS	PERCENT	EXPOSURE LIMIT	UNITS	AGENCY	TYPE
HAZARDOUS COMPONENTS					
COPPER CAS #: 7440-50-8	40-50%	1.000	mg/m3	ACGIH	TWA-T-DUST
		0.200	mg/m3	ACGIH	TWA-FUME
		1.000	mg/m3	MSHA	TWA-T-DUST
		2.000	mg/m3	MSHA	STEL-T-DUST
		0.200	mg/m3	MSHA	TWA-FUME
		1.000	mg/m3	OSHA	TWA-T-DUST
		0.100	mg/m3	OSHA	TWA-FUME
		1.000	mg/m3	CAL OSHA	TWA-T-DUST
		0.200	mg/m3	CAL OSHA	TWA-FUME
GRAPHITE (SYNTHETIC) CAS #: NONE	50-60%	10.000	mg/m3	ACGIH	TWA
		10.000	mg/m3	OSHA	TWA-T-DUST
		5.000	mg/m3	OSHA	TWA-R-DUST

NATIONAL FRICTION PRODUCTS

Division of Motion Control Industries, Inc.

TELEPHONE (219) 753-6381

1441 HOLLAND STREET • P.O. BOX 6227 • LOGANSPORT, INDIANA 46047

(FAX) 219-753-6381

REC'D FEB 23 1994

6090K56-6

No: 225

May be used to
Comply with
OSHA Hazard Communication
Standard 1910.1200
Date Prepared May 12, 1990
Prepared by K.L. Hasselkus
Telephone: 219-753-4391

MATERIAL SAFETY DATA SHEET

Friction Material

HMIS RATING

- 0 Fire Hazard
- 1 Health Hazard
- 0 Reactivity
- 1 Personal Protection

National Friction Products materials are a resin bonded product which do not contain asbestos. When used as intended, these products meet the OSHA definition of an article and is exempt from the Hazard Communication Standard. A potential for exposure to dust when grinding, drilling, milling, etc. exists and therefore all information contained within should be followed.

Materials listed on this data sheet are contained in these products. Exact percentages are proprietary and confidential and will not be disclosed other than as required in accordance with the regulations.

The data sheet is not part of any contract or sale. While the information and recommendations set forth herein are believed to be accurate, National Friction Products makes no warranty with respect there to and disclaims all liability from reliance thereon.

All applicable and aforementioned standards and specifics must be consulted for specific requirements, recommendations and controls

SECTION I - IDENTITY

Non asbestos friction materials - Identity found on box or product.

NF-101, NF-102, NF-114, NF-118, NF-119, NF-133
NF-143, NF-144, NF-250, NF-321, NF-326, NF-329, NF-332
NF-401, NF-405A, NF-409, NF-411A, NF-421, NF-500
NF-506, NF-508, NF-609, NF-610, NF-704, NF-705, NF-708,
NF-712, NF-713, NF-808, NF-809, NF-910, NF-911, NF-912
NF-913 NF-914, NF-961, NF-963, NF-966, NF-968

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Type	CAS	Hazard	OSHA	NIOSH	ACGIH Components	Wt. Upto	
**Barimite	7727-43-7	Physical Irritant	10 mg /m³	5 mg /m³	10 mg /m³	30 MP/ CF	30%
**Brass	7740-50-8	Respiratory Irritant				1 mg/m³	10%
**Aluminum Oxide	1344-29-1	Respiratory Irritant	10 mg /m³	10 mg /m³	5 mg /m³	10 mg/m³	10%
Graphite/ Carbon/ Coke		Respiratory Irritant	2.5 mg /m³	2.5 mg /m³	2.5 mg /m³	2.5 mg/m³	3-62%
Glass Fibers	65997-17-3	Respiratory Irritant	5 mg /m³	3x10 ⁶ fibers/ m³	10 mg /m³	5 mg/m³	25%
**Phenolic Resins	9003-35-4	Respiratory Irritant				5 mg/m³	33%

The above components are each part of a resin bonded system. The product is formed into specified shapes. The composite of the listed chemical items has formed a chemically bound product which no longer necessarily exhibits the chemical properties of the above ingredients.

** Listed on Title III Section 313

SECTION III HEALTH HAZARD DATA

- A. TLV - Non-asbestos containing friction materials are not currently regulated by OSHA, NIOSH, and ACGIH. When handled properly, the material does not present a known health risk. Necessary precautions should be practiced to avoid creating uncontrolled dust when grinding, drilling or other machine work.
- B. Carcinogenicity NTP-No IARC-No OSHA - No
- C. Signs and symptoms of exposure to dust - Itching may develop on exposed skin. Dryness of the throat and shortness of breath indicates overexposure to the generated dust.
- D. Medical conditions generally effected by exposure - long term overexposure to dust may lead to pulmonary problems.
- E. Emergency and First Aid Procedures - Should not be required from reasonable handling of product.
- F. Hazardous Ingredient Health Hazard - aluminum oxide, barium sulfate, graphites/carbon/cokes, glass fibers, brass, and phenolic resins, dust can cause skin, eye, respiratory, and physical irritation. Prolonged overexposure to the dust perhaps may lead to pneumoconiosis, fibrosis, and pulmonary problems.

PRODUCT NAME	SP-350 (Aerosol) #3262	MSDS003262
MANUFACTURED BY:	CRC CHEMICALS	Phone (215) 674-4300
1015 QUIS DRIVE, WARMINSTER, PA. 18974		

INGREDIENTS	CAS #	ACGIH TLV	OSHA PEL	Other Limits	%
Metal Alkyl Aryl Sulfonate	NA	NA	NA	5mg/M ³	42
Inhibited Paraffinic Oil	NA	NA	NA	(Mist)	
Mineral Spirits	64742-47-8	NA	NA	200	26
1,1,1 Trichloroethane	71-55-6	350	350		29
Carbon dioxide	124-38-9	5000	NA		3
Both the inhibited paraffinic oil and the alkyl aryl sulfonate are not hazardous by OSHA standards.					
Note: The carbon dioxide functions as the propellant for this aerosol package. Pressure = 85 psig at 70°F.					

PHYSICAL DATA (Without propellant)		
Specific Gravity 0.9657	Vapor Pressure NA	% Volatile 58
Boiling Point 165°F (Initial)	Evaporation Rate NA	
Freezing Point NA	Vapor Density Heavier than air.	
Appearance and Odor Amber translucent liquid - pleasant odor.		
Solubility Negligible in water.		

FIRE AND EXPLOSION DATA		
Flashpoint 140°F Method COC	Flammable Limits NA	
Extinguishing Media Dry chemical, Foam, CO ₂	LEL	UEL
Unusual Hazards Aerosol cans may explode at temperatures above 130°F.		

REACTIVITY AND STABILITY	
Stability Stable	
Hazardous decomposition products (Thermal) - Hydrogen chloride, carbon monoxide and possibly phosgene	
Materials to avoid Strong oxidizers	

PROTECTION INFORMATION	
Ventilation To maintain vapor conc. below TLV.	
Respiratory Self contained breathing apparatus for vapor conc. above TLV.	
Resistant Solvent resistant	Eye & Face Safety goggles
Other Protective Equipment Not normally required for aerosol packages.	



SAFETY DATA SHEET

NOTE: NO REPRESENTATION IS MADE AS TO THE ACCURACY OF THE INFORMATION
HEREIN. SEE PAGE 5 FOR CONDITIONS UNDER WHICH DATA ARE FURNISHED.

Trade Name and Synonyms

01976 RUST PROOF COMPOUND L

Manufacturer's Name

Texaco Inc

Emergency Telephone No.

(914) 831-3400 ext. 406

Address

P.O. Box 509 Beacon, NY 12508

Chemical Name and/or Family or Description

Rust Proofing Compounds

THIS PRODUCT IS CLASSIFIED AS:

☒ HAZARDOUS BY DEFINITION NO.(S) 1 ☐ NOT HAZARDOUS:
ON ATTACHED EXPLANATION SHEETS

WARNING STATEMENT:

CAUTION: COMBUSTIBLE

OCCUPATIONAL CONTROL PROCEDURES

Protective Equipment (Type)

Eyes: Chemical type goggles or face shield optional.

Skin: Exposed employes should exercise reasonable personal cleanliness; this includes cleansing exposed skin areas several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.

Inhalation: Supplied air respiratory protection for cleaning large spills or upon entry into tanks, vessels, or other confined spaces.

Ventilation: Normal

Permissible Concentrations:

Air: TLV for distillate portions = 100 ppm (stoddard solvent); 5 mg/cu. meter for mineral oil mist; averaged over 8 hr daily exposure

EMERGENCY AND FIRST AID PROCEDURES

First Aid

Eyes: As with most foreign materials, should eye contact occur, flush eyes with plenty of water.

Skin: None considered necessary.

Ingestion: Do NOT induce vomiting. Aspiration may cause chemical pneumonia.

Inhalation: Should symptoms noted under physiological effects occur, remove to fresh air. If not breathing, apply artificial respiration.

Other Instructions: None.

N.D. - Not Determined N.A. - Not Applicable

< Less Than > Greater Than



COMPOSITION

Code
No.

01976

Components Presenting a Significant Hazard

%

Petroleum distillate which is similar to Stoddard Solvent and is a mixture of straight and branched chain paraffins, naphthenes (cycloparaffins) and alkyl aromatic hydrocarbons. The principal components are aliphatic hydrocarbons ranging from C-5 to C-16 with less than 20% by volume aromatic hydrocarbons. The boiling point range is 300-400 F.

Other Components

%

Petroleum oil
CHO
Additive package containing:
aluminum

65 - 80
1 - 5
Less than 1

ADDITIONAL COMMENTS

TEXACO INTENDS TO COMPLY FULLY WITH PROVISIONS OF THE TOXIC SUBSTANCES CONTROL ACT
STATE OF MICHIGAN CRITICAL MATERIALS ACT (REVISED 1983)

No critical materials present.

TEXACO INC. DOES NOT RECOMMEND THIS PRODUCT FOR COATING THE INTERIOR OF POTABLE WATER TANKS.

To determine applicability or effect of any law or regulation with respect to this product, user should consult his legal advisor or the appropriate government agency. Texaco does not undertake to furnish advice on such matters.

By R. T. Richards Title Mgr. Env. Conservation & Toxicology
Date 01-07-83 ☒ New ☐ Revised ☐ Supersedes

N.D. - Not Determined N.A. - Not Applicable

< Less Than > Greater Than

MATERIAL SAFETY DATA SHEET

MSDS Identity number : 1#2#3

MSDS Revision date : November 14, 1991

Signature of Preparer

John L. Givens

NFPA HAZARD RATING

HEALTH 2

FIRE 0

REACTIVITY 0

SPECIFIC HAZARD COR

Section I - PRODUCT INFORMATION

Manufacturer's Name:

Michlin Diazo Products Corp.

10501 Haggerty Street

Dearborn, MI 48126

Phone No: (313) 846-5700

CHCM-TEL 24 Hr. Emergency No: (800) 255-3924

Common Name:

AQUA AMMONIA

Chemical Name:

AMMONIUM HYDROXIDE SOLUTION

PRODUCT USE :

Diazo developer, fertilizers, household cleaners

Section II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

INGREDIENTS

OSHA

ACGIH

C.A.S. No.

PERCENT

Number 1 Strength

AMMONIA GAS IN WATER	35(STEL)	35(STEL)	1336-21-6	29.4%
WATER	NONE	NONE	7732-18-5	70.6%
Non-Hazardous Corrosive Inhibitor			Mixture	Trace

Number 2 Strength

AMMONIA GAS IN WATER	35(STEL)	35(STEL)	1336-21-6	25.5%
WATER	NONE	NONE	7732-18-5	74.5%
Non-Hazardous Corrosive Inhibitor			Mixture	Trace

Number 3 Strength

AMMONIA GAS IN WATER	35(STEL)	35(STEL)	1336-21-6	17.8%
WATER	NONE	NONE	7732-18-5	82.2%
Non-Hazardous Corrosive Inhibitor			Mixture	Trace

Section III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical State:

Liquid

Odor threshold

<= 5 ppm

Appearance/Odor :

Colorless liquid with pungent irritating odor.

Specific Gravity(H₂O=1) :

0.8974 @ 15.5 Degree C

Boiling Point (Deg. C) : 27 C

Vapor Pressure (MM Hg) : 550 @ 20 Deg. C.

Evaporation Rate (Water=1):

No Data

Vapor Pressure:

475 MMHg @ 15.5 Degree C

Percent volatile by volume

No Data

Solubility in water:

Complete

Freezing Point:

Approximately -75 Degree C

pH:

11 - 13

Sensitivity to Mechanical Impact: N/A

Rate of Burning

Will not burn

REC'D FEB 23 1994

MATERIAL SAFETY DATA SHEET



LIQUID CARBONIC INDUSTRIES

810 JORIE BLVD. • OAK BROOK, IL 60521-2216 • 708 572-7500

OXYGEN, COMPRESSED

DOT: UN 1072
HAZ.CL.: Division 2.2
LABELS: Nonflammable Gas,
Oxidizer

October 1991

24 Hour Emergency Phone Numbers: (504) 673-8831; CHEMTREC (800) 424-9300

SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Oxygen
COMMON NAME AND SYNONYMS: Oxygen, Compressed (D.O.T.); Gaseous Oxygen, GOX;
Oxygen Gas
CHEMICAL FAMILY: Oxidizer FORMULA: O₂

SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1991-1992 ACGIH TLV UNITS
Oxygen	99.5+	7782-44-7	None OSHA 1989 TWA - None Listed

SECTION III--PHYSICAL DATA

BOILING POINT (°F.):	-297	SPECIFIC GRAVITY (H ₂ O=1):	N/A (Gas)
VAPOR PRESSURE:	@ 70°F *	% VOLATILE BY VOLUME:	N/A (Gas)
VAPOR DENSITY (AIR=1):	@ 70°F = 1.11	EVAPORATION RATE (BUTYL ACETATE=1):	N/A (Gas)
SOLUBILITY IN WATER:	Slightly		
APPEARANCE AND ODOR:	Colorless, odorless gas		

* Above critical temperature

SECTION IV--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED):	N/A	FLAMMABLE LIMITS:	LEL N/A	UEL N/A
----------------------------	-----	-------------------	------------	------------

EXTINGUISHING MEDIA:
Fires with oxygen as the oxidizer should be fought with copious quantities of water.

SPECIAL FIRE FIGHTING PROCEDURES: If possible, stop the source of oxygen which is supporting the fire. Use water spray to cool surrounding containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vigorously accelerates combustion. Many compounds which are not flammable in air may burn in pure oxygen. If cylinders are involved in a fire, safely relocate or keep cool with water spray.

SECTION V--HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Yes	Skin?	No	Ingestion?	No
Carcinogenicity:	NTP?	No	IARC Monographs?	No	OSHA?	No

EFFECTS OF OVEREXPOSURE:

Inhalation: Oxygen is the vital element in the atmosphere in which we live and breathe. The atmosphere contains approximately 21 molar % oxygen. Breathing higher concentrations could lead to hyperoxia and pneumonia or could present a risk of inflammation of organic matter in the body.

Persons in ill health where such illness would be aggravated by exposure to higher than normal levels of oxygen should not be allowed to work with or handle this product.

(Continued on Supplemental Sheet)

REC'D FEB 01 1994

MATERIAL SAFETY DATA SHEET



LIQUID CARBONIC INDUSTRIES

810 JORIE BLVD. • OAK BROOK, IL 60521-2216 • 708 572-7500

NITROGEN, COMPRESSED

DOT: UN 1066
HAZ.CL.: Division 2.2
LABEL: Nonflammable Gas

October 1991

24 Hour Emergency Phone Numbers: (504) 673-8831; CHEMTREC (800) 424-9300

SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Nitrogen
COMMON NAME AND SYNONYMS: Nitrogen or Nitrogen, Compressed (DOT)
CHEMICAL FAMILY: Inert Gas FORMULA: N₂

SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1991-1992 ACGIH TLV UNITS
Nitrogen	99.9+	7727-37-9	Simple Asphyxiant* OSHA 1989 TWA - None Listed

*Oxygen levels should be maintained at greater than 18 molar % at normal atmospheric pressure (pO₂>135 torr).

SECTION III--PHYSICAL DATA

BOILING POINT (°F.):	-320.5	SPECIFIC GRAVITY (H ₂ O=1):	N/A (Gas)
VAPOR PRESSURE:	*	% VOLATILE BY VOLUME:	N/A (Gas)
VAPOR DENSITY (AIR=1):	@ 70°F = 0.97	EVAPORATION RATE (BUTYL ACETATE=1):	N/A (Gas)
SOLUBILITY IN WATER:	Very slightly		
APPEARANCE AND ODOR:	Colorless, odorless gas		

* Above the critical temperature of -233°F

SECTION IV--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED):	N/A	FLAMMABLE LIMITS:	LEL	UEL
EXTINGUISHING MEDIA:	Nonflammable, Inert Gas		N/A	N/A
SPECIAL FIRE FIGHTING PROCEDURES:	N/A			

UNUSUAL FIRE AND EXPLOSION HAZARDS:

If cylinders are involved in a fire, safely relocate or keep cool with water spray.

SECTION V--HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Yes	Skin?	No	Ingestion?	No
Carcinogenicity:	NTP?	No	IARC Monographs?	No	OSHA?	No

EFFECTS OF OVEREXPOSURE:

Inhalation: Overexposure to high concentrations so as to exclude an adequate supply of oxygen to the lungs causes dizziness, drowsiness and eventual unconsciousness. Persons in ill health where such illness would be aggravated by exposure to nitrogen should not be allowed to work with or handle this product.

EMERGENCY AND FIRST AID PROCEDURES:

If Inhaled: Remove to fresh air. If unconscious or breathing is difficult, administer artificial respiration with supplemental oxygen. Keep warm and at rest. Caution when entering contaminated areas to ventilate to acceptable oxygen levels. See CGA Bulletin SB-2 "Oxygen Deficient Atmospheres."

REC'D FEB 01 1994

MATERIAL SAFETY DATA SHEET



LIQUID CARBONIC INDUSTRIES

810 JORIE BLVD. • OAK BROOK, IL 60521-2216 • 708 572-7500

ARGON, Compressed

DOT: UN 1006
HAZ.CL.: Division 2.2
LABEL: Nonflammable Gas

May 1991

REC'D OCT 13 1994

24 Hour Emergency Phone Numbers: (504) 673-8831; CHEMTREC (800) 424-9300

SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Argon
COMMON NAME AND SYNONYMS: Argon or Argon, Compressed (DOT)
CHEMICAL FAMILY: Rare or Inert Gas FORMULA: Ar

SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1990-1991 ACGIH TLV UNITS
Argon	99.9+	7440-37-1	Simple Asphyxiant OSHA 1989 TWA - None Listed

SECTION III--PHYSICAL DATA

BOILING POINT (°F.): -303 SPECIFIC GRAVITY (H₂O=1): N/A (Gas)
VAPOR PRESSURE: * % VOLATILE BY VOLUME: N/A (Gas)
VAPOR DENSITY (AIR=1): @ 70°F = 1.38 EVAPORATION RATE (BUTYL ACETATE=1): N/A (Gas)
SOLUBILITY IN WATER: Very slightly
APPEARANCE AND ODOR: Colorless, odorless gas
* Above the critical temperature of -188°F

SECTION IV--FIRE AND EXPLOSION HAZARD DATA

	LEL	UEL
FLASH POINT (METHOD USED): N/A		
EXTINGUISHING MEDIA: Nonflammable, Inert Gas	N/A	N/A
SPECIAL FIRE FIGHTING PROCEDURES: N/A		

UNUSUAL FIRE AND EXPLOSION HAZARDS:

If cylinders are involved in a fire, safely relocate or keep cool with water spray.

SECTION V--HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Yes	Skin?	No	Ingestion?	No
Carcinogenicity:	NTP?	No	IARC Monographs?	No	OSHA?	No

EFFECTS OF OVEREXPOSURE:

Inhalation: Overexposure to high concentrations so as to exclude an adequate supply of oxygen to the lungs causes dizziness, drowsiness and eventual unconsciousness. Persons in ill health where such illness would be aggravated by exposure to argon should not be allowed to work with or handle this product.

EMERGENCY AND FIRST AID PROCEDURES:

If Inhaled: Remove to fresh air. If unconscious or breathing is difficult, administer artificial respiration with supplemental oxygen. Keep warm and at rest. Caution when entering contaminated areas to ventilate to acceptable oxygen levels. See CGA Bulletin SB-2 "Oxygen Deficient Atmospheres."

MATERIAL SAFETY DATA SHEET



LIQUID CARBONIC INDUSTRIES

810 JORIE BLVD. • OAK BROOK, IL 60521-2216 • 708 572-7500

HYDROGEN, COMPRESSED

DOT: UN 1049
HAZ.CL.: Division 2.1
LABEL: Flammable Gas

September 1991

24 Hour Emergency Phone Numbers: (504) 673-8831; CHEMTREC (800) 424-9300

SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Hydrogen
COMMON NAME AND SYNONYMS: Hydrogen, Compressed (D.O.T.); Normal Hydrogen;
Gaseous Hydrogen; Water Gas
CHEMICAL FAMILY: Flammable Inorganic Gas FORMULA: H₂

SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1991-1992 ACGIH TLV UNITS
Hydrogen	99.9+	1333-74-0	Simple Asphyxiant * OSHA 1989 TWA - None Listed

* Oxygen levels should be maintained at greater than 18 molar % at normal atmospheric pressure (pO₂>135 torr).

SECTION III--PHYSICAL DATA

BOILING POINT (°F.):	-423	SPECIFIC GRAVITY (H ₂ O=1):	N/A (Gas)
VAPOR PRESSURE:	@ 70°F *	% VOLATILE BY VOLUME:	N/A (Gas)
VAPOR DENSITY (AIR=1):	@ 70°F = .069	EVAPORATION RATE (BUTYL ACETATE=1):	N/A (Gas)
SOLUBILITY IN WATER:	Very Slightly		
APPEARANCE AND ODOR:	Colorless, odorless gas		

* Above the critical temperature

SECTION IV--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED):	N/A (Gas)	FLAMMABLE LIMITS:	<u>LEL</u> 4.0%	<u>UEL</u> 74.5%
EXTINGUISHING MEDIA:	Water, carbon dioxide, dry chemical			

SPECIAL FIRE FIGHTING PROCEDURES:

If possible (safely) stop the flow of burning hydrogen. Cool surrounding containers with water spray. Hydrogen burns with an almost invisible flame of relatively low radiation.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Hydrogen is very light and rises very rapidly in air. Should a hydrogen fire be extinguished and the flow of gas continue, increase ventilation to prevent an explosion hazard, particularly in the upper portions of buildings or sheds where the gas might "collect."

SECTION V--HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Yes	Skin?	No	Ingestion?	No
Carcinogenicity:	NTP?	No	IARC Monographs?	No	OSHA?	No

EFFECTS OF OVEREXPOSURE:

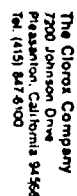
Inhalation: High concentrations of hydrogen so as to exclude an adequate supply of oxygen to the lungs causes dizziness, deeper breathing due to air hunger, possible nausea and eventual unconsciousness. Hydrogen is inactive biologically and essentially nontoxic; therefore, the major property is the exclusion of an adequate supply of oxygen to the lungs. Persons in ill health where such illness would be aggravated by exposure to hydrogen should not be allowed to work with or handle this product.

(Continued on Supplemental Sheet)

REC'D FEB 01 1994

Bldg. Maint.
MSDSs

13249-11681



Material Safety Data Sheet

CLOROX - NMIS
REALITY
FLAMMABILITY
REACTIVITY
Personal Protection

[illegible]

SPARKS

[illegible]

0001

[illegible]

REC'D NOV 21 1994

WNVV

Ac-4
13191
13192
1323C

GEORGE WINTER, SAFETY DATA SHEET
Product Name: WINTER, SAFETY DATA SHEET
Manufacturer: WINTER, SAFETY DATA SHEET
Date: 10/20/78
Version: 1.0
Section 1: Identification
Section 2: Hazardous Ingredients
Section 3: Composition/Information
Section 4: First Aid Measures
Section 5: Fire and Explosion Data
Section 6: Reactivity Data
Section 7: Spill or Leak Procedures
Section 8: Protective Equipment
Section 9: Physical Properties
Section 10: Other Information

WINTER, SAFETY DATA SHEET
Section 1: Identification
Section 2: Hazardous Ingredients
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Section 4: First Aid Measures
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Section 8: Protective Equipment
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REC'D NOV 21 1994

FANTASTIC

MATERIAL SAFETY DATA

MSDS CODE: 20280

Dow Consumer Products Inc.
 16000 Dow Road - Cincinnati, OH 45228-0001

ACC # 11600
 ACC # 11600

24 HOUR EMERGENCY ASSISTANCE	
Toll-free 800-963-4261	
HAZARD RATING	1
4 = Extreme	3 = High
2 = Moderate	1 = Slight
0 = Insignificant	

MATERIAL IDENTIFICATION

TRADE NAME: Fantastik® All Purpose Cleanser/STONANTS:

Tenize Spray Cleaner
 Fantastik Spray Cleaner

CHEMICAL FORMULA: Mixture

DOT PROPER SHIPPING NAME: None

DOT HAZARD CLASS/I.D. NO.: None

DOT LABELING: None

CAS NO.: None

U.S. SURFACE FREIGHT CLASSIFICATION: Cleaning Compound, Liquid NOI

INGREDIENTS:

MATERIAL	CAS NUMBER	%	TLV (UNITS)	HAZARD DATA
2-butoxyethanol	111-76-2	1c 5	25 ppm (skin) 75 ppm STEL	ACGIH
Surface Active Agents	-	1c 5	Not Established	ACGIH
Alkaline Builders & Dye	-	1c 1	Not Established	ACGIH
Water			8c89	

PRECAUTIONARY STATEMENTS

Please thoroughly if sprayed in eyes.

PHYSICAL DATA

BOILING POINT, 760 mm Hg: about 100°C
 SPECIFIC GRAVITY (H₂O = 1): 1.008
 VAPOR DENSITY (air = 1): 1
 VAPOR PRESSURE at 20°C: 17.5 mm Hg
 SOLUBILITY IN WATER: Complete
 EVAPORATION RATE (Water = 1): 1
 VOLATILITIES BY VOLUME @ 70°F, %: Negligible
 PH: 12.3
 APPEARANCE AND ODOR: A clear light blue liquid with butyl odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None TCC
 EXTINGUISHING MEDIA: na
 FLAMMABLE LIMITS IN AIR: na Lel Uel

SPECIAL FIRE FIGHTING PROCEDURES: na

UNUSUAL FIRE AND EXPLOSION HAZARDS: na

Preparation and packaging information for this product and associated literature are available in the MSDS Summary.
 1 - Printed form, 2 - Small form, 3 - Large form, 4 - Additional information.

MATERIAL SAFETY DATA

MATERIAL NAME: Fantastik®
 MSDS CODE: 20280

HEALTH HAZARD INFORMATION

HAZARD DATA: Acute LD₅₀ in rats: Greater than 30 g/kg - Not toxic. Acute Inhalation Toxicity in rats: Classified as not toxic. Acute Dermal Toxicity on rabbits: Classified as not toxic. Primary Skin Irritation on rabbits: Not an irritant. Eye Irritation on rabbits: Not an irritant.
 EFFECTS OF OVEREXPOSURE:

Prolonged contact with skin or eyes may cause transient irritation.

EMERGENCY AND FIRST AID PROCEDURES:

Rinse eyes with water if contact occurs.

*Tested to GHS requirements. Contains no listed carcinogens.

REACTIVITY DATA

STABILITY: Stable CONDITIONS TO AVOID: na

INCOMPATIBILITY: na

HAZARDOUS DECOMPOSITION PRODUCTS: None known

HAZARDOUS POLYMERIZATION: No CONDITIONS TO AVOID: None known

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Small spills: Absorb and wipe up or rinse away with water.

Large spills: Dike far ahead of spills and collect for later disposal.

WASTE DISPOSAL METHOD: Rinse empty container before discarding in trash collection.

Product is biodegradable in the environment but may be toxic to fish. Small amounts into locally approved sewage treatment plants. Follow local effluent pretreatment guidelines and notify treatment plant in case of large spills.

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Not required

VENTILATION: Normal

PROTECTIVE GLOVES: Not usually required

EYE PROTECTION: Safety glasses are helpful.

OTHER PROTECTIVE MEASURES: None

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

If frozen will return to original condition if shaken after thawing.

OTHER PRECAUTIONS:

Do not spray directly into electrical outlets. Not recommended for use on non-urethane finishes.

PREPARED BY: Tenize Division - Dow Consumer Products Inc.
 Research Services Group

DATE: 9/1/87

REC'D NOV 21 1994

Acc WINDOW

MATERIAL SAFETY DATA SHEET MSDS CE 0120
Approved by U.S. Department of Labor as "Essentially Similar" to Form OSHA-201 DATE 7/8/81

10178, 10171, 11958, 10085, 10087 Page 1 of 2

I. PRODUCT IDENTIFICATION

CHEMICAL NAME	Terpineol (Estered 15esters)	REGULAR TELEPHONE NO. 302-575-5200
AND SYNONYMS	Pine oil	EMERGENCY TELEPHONE NO. 302-595-1000
CHEMICAL	Terpene alcohol	CAS NO. -
FAMILY		
FORMULA	C ₁₅ H ₂₄ O	MOLECULAR WEIGHT -
TRADE NAME	ERCOO PINE OIL	
AND SYNONYMS		

II. HAZARDOUS INGREDIENTS

MATERIAL	%	TLV/TWA VALUES ADOPTED BY ACGIH 1980
Terpene alcohols	25	Not established

III. PHYSICAL DATA

DISTILLATION RANGE	55-206°C (133°F-403°F) 95% 220°C (428°F)	FREEZING POINT	0°C (32°F)
VAPOR PRESSURE @ 20°C	<1 mm Hg	SPECIFIC GRAVITY (H ₂ O=1)	0.833 typical
VAPOR DENSITY (AIR=1)	5.3	PERCENT VOLATILE BY VOLUME (%)	100
SOLUBILITY IN WATER, % BY WEIGHT @ 20°C	Slight	EVAPORATION RATE (BUTYL ACETATE=1)	<1
APPEARANCE AND ODOR: Pale yellow to dark green; slightly heady; distinct ethyl ether odor.		pH	NA

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	66°C (150°F) TCC	AUTOIGNITION	Not determined
(TEST METHOD)		TEMPERATURE	
FLAMMABLE LIMITS IN AIR	LOWER Not determined	UPPER	Not determined
PERCENT BY VOLUME			
EXTINGUISHING MEDIA:	Water fog, foam, dry chemical, carbon dioxide.		
SPECIAL FIRE-FIGHTING PROCEDURES:	Cool containers with water if exposed to fire.		
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None		

NOTES: NA = NOT APPLICABLE

ERCOO PINE OIL is registered with the Pesticide Division of the Environmental Protection Agency under EPA Registration Number 891-175.

We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combining with our products may be used. We accept no responsibility for results obtained by the application of this information or the products of other manufacturers in combination with our products. Users are advised to read the label for the product to which this information is being applied. The label for the product to which this information is being applied contains information on the safe use of the product. The label for the product to which this information is being applied contains information on the safe use of the product. The label for the product to which this information is being applied contains information on the safe use of the product.

V. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not established

EFFECTS OF OVEREXPOSURE: Irritating to skin and mucous membranes. Inhalation can cause headache and palpitations.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush with water for 15 minutes. Call physician.
SKIN: Remove contaminated clothing. Wash with soap and water.
INHALATION: Remove victim from contaminated area. Administer artificial respiration if necessary. Call physician.

VI. REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID: May be susceptible to spontaneous heating.
UNSTABLE	
STABLE	
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Burning liberates CO, CO₂, and soot.

HAZARDOUS POLYMERIZATION: MAY OCCUR WILL NOT OCCUR CONDITIONS TO AVOID: Not applicable

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Remove sources of ignition. Pump large spills to metal safety tank. Absorb small spills with sawdust or clean sand.

WASTE DISPOSAL METHOD: Incinerate. Dispose of in accordance with local, state, and Federal regulations.

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION	NIOSH-approved air-line breathing apparatus in high vapor concentrations.
VENTILATION	LOCAL EXHAUST - Recommended MECHANICAL (GENERAL) - Recommended OTHER -
PROTECTIVE GLOVES	Solvent-resistant rubber
OTHER PROTECTIVE EQUIPMENT	Not applicable
EYE PROTECTION	Chemical splash eye

IX. SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING: WARNING! KEEP OUT OF REACH OF CHILDREN.
EASING. IF SWALLOWED. If swallowed, do not induce vomiting but call a physician. Vomiting may be harmful. Keep out of eyes. May cause eye damage or skin irritation. If contact with eyes occurs, flush with water immediately. Get medical attention. Avoid contamination of food.

REC'D NOV 21 1994

REC'D JUL 11 1994

JANI-SERV ITEM #CA053A

JANI-SERV MSDS #70

Material Safety Data Sheet

to be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072



IDENTITY (As Used on Label and List)
 URINAL SENTRY CLEANER BLOCK

Note: Blank spaces are not permitted. If any item is not applicable, or no
 information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name

PRODUCTS INC.

4010 South Avenue • Toledo, Ohio 43615
 Phone: (419) 531-9741

Emergency Telephone Number

(419) 531-9741

Telephone Number for Information

(419) 531-9741

Date Prepared

July 5, 1989

Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Borax CAS 1303-96-4	N/A	N/A	N/A	
Urea	N/A	N/A	N/A	
Versene	N/A	N/A	N/A	
Quaternary CAS 139-07-1	N/A	N/A	N/A	
Green Apple Fragrance	N/A	N/A	N/A	
Blue Dye	N/A	N/A	N/A	TRADE SECRET
Surfactant - Non Ionic CAS 9004-99-3	N/A	N/A	N/A	
Water CAS 7732-18-5	N/A	N/A	N/A	
Polyglycol CAS 25322-68-3	N/A	N/A	N/A	

** CAS numbers are not available for fragrances since they are proprietary mixtures from
 suppliers to Fresh Products. The name of the firm supplying a specific fragrance is
 available on request.

Section III — Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H ₂ O = 1)	1.18
Vapor Pressure (mm Hg.)	N/A	Melting Point	140°F
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	unknown.

Solubility in Water

Completely soluble

Appearance and Odor

Solid block

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	LEL unknown	UEL unknown
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Extinguishing Media

Water fog - foam - CO₂ - dry chemical

Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing
 apparatus and turn-out gear

Unusual Fire and Explosion Hazards

MATERIAL SAFETY DATA SHEET

AMEREX CORPORATION
P. O. BOX 81, TRUSSVILLE, AL 35173-0081
RESPONSIBLE PARTY: MSDS COORDINATOR

TELEPHONE: 205-655-3271
EMERGENCY TELEPHONE NO. DAY/NIGHT: CHEMTREC 1-800-424-9300

DATE PREPARED: 8-1-91
SUPERSEDES: 6-22-88

Fire Extinguishers

IDENTIFICATION

PRODUCT NAME: ABC DRY CHEMICAL

SYNONYMS: MULTI-PURPOSE DRY CHEMICAL, MAP, (MONO) AMMONIUM PHOSPHATE, ALL-PURPOSE DRY CHEMICAL

HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	OSHA PEL TWA - mg/m3	ACGIH TLV TWA - mg/m3
Mica	12001-26-2	3 Respirable Dust	3 Respirable Fraction
Kaolin	1332-58-7	10 Total Dust 5 Respirable Fraction	10 (c)

OTHER INGREDIENTS

MATERIAL	CAS NO.	OSHA PEL TWA - mg/m3	ACGIH TLV TWA - mg/m3
Monoammonium Phosphate	7722-76-1	15 Total Dust (a) 5 Respirable Fraction	10 (b)
Ammonium Sulfate	7783-20-2	15 Total Dust (a) 5 Respirable Fraction	10 (b)

(a) Particulate matter not otherwise classified.

(b) Particulate matter not otherwise classified. Total dust containing no asbestos & less than 1% crystalline silica.

c) Total dust containing no asbestos & less than 1% crystalline silica.

PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT (°F): NA	SPECIFIC GRAVITY (H ₂ O = 1): 0.85	VAPOR PRESSURE (MM HG): NA
PERCENT VOLATILE (%): NA	VAPOR DENSITY (AIR = 1): NA	EVAPORATION RATE: NA
SOLUBILITY IN WATER: Water repellent coated	REACTIVITY IN WATER: None	MELTING POINT (°F): NA
pH: 4.4	APPEARANCE & ODOR: Yellow powder. No characteristic odor.	
FLASH POINT (°F): None	AUTO IGNITION TEMPERATURE (°F): NA	FLAMMABLE LIMITS IN AIR BY VOL: NA
EXTINGUISHER MEDIA: None. This material is an extinguishing agent.		
SPECIAL FIRE FIGHTING PROCEDURES: None		UNUSUAL FIRE AND EXPLOSION HAZARDS: None

PHYSICAL HAZARDS

STABILITY: Stable	CONDITIONS TO AVOID: NA
INCOMPATIBILITY (MATERIALS TO AVOID): Strong Alkalis, Mg, Sodium Nitrite, Swimming Pool Sanitizers (Inorganic Perchlorates, Sodium Dichloroisocyanurate Dihydrate, Trichloroisocyanuric Acid, Calcium Hypochlorite, Etc.)	
HAZARDOUS DECOMPOSITION PRODUCTS: Ammonia, Carbon Monoxide and Oxides of Nitrogen	
HAZARDOUS POLYMERIZATION: Will not occur	CONDITIONS TO AVOID: NA

BALL INDUSTRIES

140 N. Aviation Blvd.
El Segundo, CA 90245
Phone No. (213)772-4131

Emergency Phone No: 1(800)228-5635

Product Code: 35220 35223
35221 35227 35229

MATERIAL SAFETY DATA SHEET**PRODUCT NAME: PINE 64****PRODUCT TYPE:** Disinfectant Cleaner**MSDS DATE :** January 2, 1993**HMIS HAZARD RATING: HEALTH= 2****FLAMMABILITY= 0****REACTIVITY= 0****HMIS SCALE: 4=VERY HIGH 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT****I HAZARDOUS INGREDIENTS**

	CAS NUMBER	OSHA (PEL)	ACGIH % (TLV)	
Didecyl Dimethyl Ammonium Chloride N-Alkyl (C14 50%,C12 40%, C16 10%)	7173-51-5	NE	NE	2.31
dimethyl Benzyl Ammonium Chloride	68391-01-5	NE	NE	1.54
Water	7732-18-5	NE	NE	

None of the ingredients are reportable under S.A.R.A. Title III Section 313

II PHYSICAL DATA**APPEARANCE & ODOR:** Clear liquid; Pine fragrance.

Boiling Point	Approx.212°F	Specific Gravity (Water = 1)	1.01
Vapor Pressure (mmHg 20C)	ND	Volatile Organic Compound	0 grams/liter
Vapor Density (Air=1)	ND	pH	8.0 - 9.0
Solubility in Water	Complete	Evap.Rate (BuAc=1)	ND

III FIRE & EXPLOSION HAZARD

Flash Point = None	Auto Ignition Temp=NA	Flammable limit LEL = NA UEL =NA
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SPECIAL FIRE FIGHTING PROCEDURES: NONE**UNUSUAL FIRE & EXPLOSION HAZARDS:** NONE**EXTINGUISHING MEDIA:** ☐ Water Spray ☐ Carbon Dioxide ☐ Foam ☐ Dry Chemical ☒ NA**IV REACTIVITY DATA**

STABILITY <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable Conditions to Avoid: NA	HAZARDOUS POLYMERIZATION <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur Conditions to Avoid: None	HAZARDOUS DECOMP./BYPRODUCT Oxides of carbon and nitrogen.
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REC'D FEB 23 1994

BALL INDUSTRIES INC.

140 N. Aviation Blvd.

El Segundo, CA 90245

Phone No. (213) 772-4131

Emergency Phone No: 1(800)228-5635

Product Code: 30347 30341

30343 30340 30349

MATERIAL SAFETY DATA SHEET**PRODUCT NAME: EXPEL**

PRODUCT TYPE: All Purpose Cleaner

MSDS DATE : January 2, 1993

HMIS HAZARD RATING: HEALTH=1

FLAMMABILITY=0

REACTIVITY=0

HMIS SCALE: 4=VERY HIGH 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT

I HAZARDOUS INGREDIENTS

	CAS NUMBER	OSHA(PEL)	ACGIH(TLV)	%
Water	7732-18-5	NE	NE	
*,** [PA,NJ,MA]2-Butoxyethanol	111-76-2	25 ppm(skin)	25 ppm(skin)	1-5
Isopropanol	67-63-0	400 ppm	400 ppm	1-5
** [PA,NJ,MA]Sodium Tripolyphosphate	7758-29-4	15 mg/m ³	10 mg/m ³	<10
NonylphenoxyPoly(ethyleneoxy)Ethanol	9016-45-9	NE	NE	
** [PA,NJ,MA]EDTA	60-00-4	NE	NE	

* Reportable under S.A.R.A. Title III Section 313

** Subject to reporting requirements under the Pennsylvania, New Jersey, and Massachusetts Hazardous Substance List.

II PHYSICAL DATA

APPEARANCE & ODOR: Clean green liquid; sassafras fragrance.

Boiling Point	Approx.212°F	Specific Gravity (Water = 1)	1.02
Vapor Pressure (mmHg 20C)	NA	Volatile Organic Compound	61 grams/liter
Vapor Density (Air=1)	NA	pH	9.0 ± 0.5
Solubility in Water	Complete	Evap.Rate (BuAc=1)	NA

III FIRE & EXPLOSION HAZARD

Flash Point = None	Auto Ignition Temp=NA	Flammable limit LEL = NA UEL = NA
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SPECIAL FIRE FIGHTING PROCEDURES: NONE

UNUSUAL FIRE & EXPLOSION HAZARDS: NONE

EXTINGUISHING MEDIA: ☐ Water Spray ☐ Carbon Dioxide ☐ Foam ☐ Dry Chemical ☒ NA**IV REACTIVITY DATA**

STABILITY	HAZARDOUS POLYMERIZATION	HAZARDOUS DECOMP./BYPRODUCT
<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable Conditions to Avoid: NA	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur Conditions to Avoid: None	Oxides of carbon .

REC'D FEB 23 1994

BALL INDUSTRIES INC.

140 N. Aviation Blvd.
 El Segundo, CA 90245
 Phone No. (213) 772-4131

Emergency Phone No: 1(800)228-5634

Product Code: 10617 10611
 10613 10610 10619

MATERIAL SAFETY DATA SHEET**PRODUCT NAME: TIME OFF FLOOR FINISH & SEAL**

PRODUCT TYPE: Acrylic Floor Finish

MSDS DATE : January 2, 1993

HMIS HAZARD RATING: HEALTH= 1

FLAMMABILITY= 0

REACTIVITY= 0

HMIS SCALE: 4=VERY HIGH 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT

I HAZARDOUS INGREDIENTS

	CAS NUMBER	OSHA(PEL)	ACGIH(TLV)	%
*,** [PA,NJ,MA]Diethylene Glycol Methyl Ether	III-77-3	NA	NA	<3
** [PA,NJ,MA]Dipropylene Glycol Methyl Ether	34590-94-8	100 ppm	100 ppm	<5
*,** Dibutylphthalate	84-74-2	5 mg/m ³	5 mg/m ³	<3
Water	7732-18-5	NE	NE	
Acrylic Polymer	Not Hazardous	NE	NE	

* Reportable under S.A.R.A. Title III Section 313

** Subject to reporting requirements under the Pennsylvania, New Jersey, and Massachusetts Hazardous Substance List.

II PHYSICAL DATA**APPEARANCE & ODOR: Milky White Liquid; Mild Acrylic odor.**

Boiling Point	Approx.212°F	Specific Gravity (Water = 1)	1.01
Vapor Pressure (mmHg 20C)	NA	Volatile Organic Compound	238 grams/liter
Vapor Density (Air=1)	NA	pH	8.0 - 8.5
Solubility in Water	Complete	Evap.Rate (BuAc=1)	NA

III FIRE & EXPLOSION HAZARD

Flash Point = NA	Auto Ignition Temp=NA	Flammable limit LEL = NA UEL =NA
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SPECIAL FIRE FIGHTING PROCEDURES: NONE

UNUSUAL FIRE & EXPLOSION HAZARDS: Material can splatter above boiling point(212°F).Polymer can burn.

EXTINGUISHING MEDIA: ☐ Water Spray ☐ Carbon Dioxide ☐ Foam ☐ Dry Chemical ☒ NA**IV REACTIVITY DATA**

STABILITY	HAZARDOUS POLYMERIZATION	HAZARDOUS DECOMP./BYPRODUCT
<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable Conditions to Avoid: Extreme Temperatures	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur Conditions to Avoid: None	Oxides of carbon and nitrogen.

REC'D FEB 23 1994

BALL INDUSTRIES INC.

140 N. Aviation Blvd.
El Segundo, CA 90245
Phone No. (213) 772-4131

Emergency Phone No: 1(800)228-5635

Product Code: 30117 30111
30113 30110 30119

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: SYMPHONY

PRODUCT TYPE: Neutral Floor Cleaner

MSDS DATE : January 2, 1993

HMIS HAZARD RATING: HEALTH= 1

FLAMMABILITY= 0

REACTIVITY= 0

HMIS SCALE: 4=VERY HIGH 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT

I HAZARDOUS INGREDIENTS

	CAS NUMBER	OSHA(PEL)	ACGIH(TLV)	%
*,** [PA,NJ,MA]2-Butoxyethanol	111-76-2 (Skin)	25 ppm (Skin)	25 ppm	<5
NonylphenoxyPoly(ethyleneoxy)Ethanol	9016-45-9	NE	NE	

* Reportable under S.A.R.A. Title III Section 313

** Subject to reporting requirements under the Pennsylvania, New Jersey, and Massachusetts Hazardous Substance List.

II PHYSICAL DATA

APPEARANCE & ODOR: Light yellow liquid; Pleasant odor.

Boiling Point	Approx. 212°F	Specific Gravity (Water = 1)	8.3
Vapor Pressure (mmHg 20C)	NA	Volatile Organic Compound	35 grams/liter
Vapor Density (Air=1)	NA	pH	6.0-6.7
Solubility in Water	Complete	Evap. Rate (BuAc=1)	NA

III FIRE & EXPLOSION HAZARD

Flash Point = None	Auto Ignition Temp=NA	Flammable limit LEL = NA UEL = NA
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SPECIAL FIRE FIGHTING PROCEDURES: NONE

UNUSUAL FIRE & EXPLOSION HAZARDS: NONE

EXTINGUISHING MEDIA: ☐ Water Spray ☐ Carbon Dioxide ☐ Foam ☐ Dry Chemical ☒ NA**IV REACTIVITY DATA**

STABILITY	HAZARDOUS POLYMERIZATION	HAZARDOUS DECOMP./BYPRODUCT
<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable Conditions to Avoid: NA	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur Conditions to Avoid: None	Oxides of carbon.

REC'D FEB 23 1994

BALL INDUSTRIES INC.

140 N. Aviation Blvd.
El Segundo, CA 90245
Phone No. (213) 772-4131

Emergency Phone No: 1(800)228-5635

Product Code: 10250 10253
10251 10257 10259

MATERIAL SAFETY DATA SHEET**PRODUCT NAME: TERMINATOR**

PRODUCT TYPE: Floor Stripper

MSDS DATE : January 2, 1993

HMIS HAZARD RATING: HEALTH= 2 FLAMMABILITY= 1 REACTIVITY= 0

HMIS SCALE: 4=VERY HIGH 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT

I HAZARDOUS INGREDIENTS

	CAS NUMBER	OSHA(PEL)	ACGIH(TLV)	%
Water	7732-18-5	NE	NE	
*,** [PA,NJ,MA]2-Butoxyethanol	111-76-2	25 ppm(Skin)	25 ppm(Skin)	< 40
*,** [PA,NJ,MA]Ethanolamine	141-43-5	3 ppm	3 ppm	< 20
NonylphenoxyPoly(ethyleneoxy)Ethanol	9016-45-9	NE	NE	

* Reportable under S.A.R.A. Title III Section 313

** Subject to reporting requirements under the Pennsylvania, New Jersey, and Massachusetts Hazardous Substance List.

II PHYSICAL DATA

APPEARANCE & ODOR: Clear to slightly amber liquid; Mild odor.

Boiling Point	Approx.212°F	Specific Gravity (Water = 1)	0.94
Vapor Pressure (mmHg 20C)	NA	Volatile Organic Compound	340 grams/liter
Vapor Density (Air=1)	NA	pH	12.0
Solubility in Water	Complete	Evap.Rate (BuAc=1)	NA

III FIRE & EXPLOSION HAZARD

Flash Point = ND	Auto Ignition Temp=NA	Flammable limit LEL = NA UEL = NA
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SPECIAL FIRE FIGHTING PROCEDURES: SCBA recommended for firefighters.

UNUSUAL FIRE & EXPLOSION HAZARDS: This material is combustible & may be ignited by heat or flame.

EXTINGUISHING MEDIA: [X] Water Spray [X] Carbon Dioxide [X] Foam [X] Dry Chemical [] NA

IV REACTIVITY DATA

STABILITY	HAZARDOUS POLYMERIZATION	HAZARDOUS DECOMP./BYPRODUCT
[X] Stable [] Unstable Conditions to Avoid: NA Incompatibility(Materials to Avoid)- Acids, oxidizers,alkalies	[] May Occur [X] Will Not Occur Conditions to Avoid: None	Oxides of carbon and nitrogen.

REC'D FEB 23 1994

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

HEALTH**HMIS^a****3****REACTIVITY****0****FLAMMABILITY****2****PERSONAL PROTECTION****B**

Identity (As Used on Label and List) EPA Reg. No. 11694-98-10637

~~Steril Spray~~ (Reorder #35481)

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION I

Manufactured For:
Ball Industries

Emergency Telephone Number
1-800-228-5635

A Division of W. W. Grainger, Inc.

Telephone Number for Information
1-800-526-4737

Address (Number, Street, City, State, and ZIP Code)
140 N. Aviation Blvd.

Date Prepared
July 16, 1993

El Segundo, CA 90245

Signature of Preparer (Optional)
REGULATORY DEPT.

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific

Chemical Identity, Common Name(s))

CAS No.

OSHA PEL

ACGIH-TLV

Other Limits

Recommended

%(Opt.)

Ethyl Alcohol

64-17-5

1000 ppm

1000 ppm

This product is not known to contain any compound in concentrations requiring reporting under SARA Title III Section 313.

Any substance listed as hazardous by the States of California, Connecticut, Florida, Illinois, Louisiana, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island are described above if known present in regulated concentrations.

SECTION III Physical/Chemical Characteristics

Boiling Point

176° F

Specific Gravity (H₂O = 1)

@70° F

0.83

Vapor Pressure (mm-Hg @ 70° F)

No Data

Melting Point

Not Applicable

Vapor Density (AIR = 1)

Less than one (1)

Evaporation Rate (Butyl Acetate = 1)

No Data

Solubility in Water

Complete

pH

8.5 ± 0.5

Appearance and Odor

Clear light yellow liquid with a floral-alcohol scent.

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used)

73° F (TCC)

Flammable Limits

No Data

LEL

No Data

UEL

No Data

Extinguishing Media -

Carbon dioxide, dry chemical, foam, fog, or water spray.

Special Fire Fighting Procedures -

Keep containers cool and vapors down with water spray. Prevent runoff from entering sewers and public waterways. Wear SCE in chemical fires.

Unusual Fire and Explosion Hazards -

Flammable liquid.

REC'D FEB 23 1994

WeatherBlok®

RODENTICIDE

REC'D FEB 23 1994

MATERIAL SAFETY DATA SHEET

SECTION 1 NAME AND HAZARD SUMMARY

Material name: **WEATHER BLOK® Bait**

Hazard summary (as defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200):

Physical hazards: None

Health hazards: Harmful (The active ingredient is designed to cause bleeding after repeated ingestion)

Read the entire MSDS for a more thorough evaluation of the hazards.

SECTION 2	INGREDIENTS	%	OSHA PEL
	Brodifacoum (CAS 56073-10-0)	0.005	Not listed
	Cereal formulation		Not listed
	Paraffin wax		Not listed
	Blue pigment		Not listed

Ingredients not precisely identified are proprietary or nonhazardous. Values are not product specifications.
gt = greater than, lt = less than, ca = approximately

SECTION 3 PHYSICAL DATA

Boiling point: 228-230°C (Brodifacoum)

Melting point: 130°F, 54.4°C (paraffin wax)

Vapor pressure (mmHG at 20°C): Negligible

Vapor density (air=1): Not applicable

Solubility in water: Insoluble

pH: No data

Specific gravity: 1.15

% Volatile by volume: Negligible

Appearance and odor: Dark wax

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

Flash point (and method): Above 375°F, 190.5°C (PMCC, paraffin wax)

Flammable limits (STP): No data

Autoignition temperature: No data

Extinguishing media: Water fog, foam, carbon dioxide, dry chemical, halogenated agents.

Special fire fighting protective equipment: Self-contained breathing apparatus with full facepiece and protective clothing.

Unusual fire and explosion hazards: None known.

SECTION 5 REACTIVITY DATA

Stability: Stable under normal conditions.

Incompatibility (materials to avoid): None known.

Hazardous decomposition products: Combustion products: carbon dioxide, carbon monoxide.

Hazardous polymerization: Will not occur.

SECTION 6 HEALTH HAZARD ASSESSMENT

General: This description of toxicological properties is based on experimental results and experience with a similar product and the active ingredient.

Ingestion: The acute oral LD₅₀ in rat is probably above 5 g/kg. A single dose of this product is classified as "practically nontoxic" by ingestion.

Eye contact: No irritation is likely to develop following contact with human eyes.

Skin contact: Irritation will probably not develop following contact with human skin.

Skin absorption: Systemically toxic concentrations will probably not be absorbed through the skin in man.

Inhalation: No toxic effects are known to be associated with inhalation of dust from this material.

Other effects of overexposure: Effects are those of anticoagulant overdosage: reduced blood clotting ability with spontaneous bleeding in various body tissues. Body accumulation will probably result after repeated exposures to Brodifacoum because its body half-life is estimated to be 120 days.

First aid procedures:

Skin: Wash material off of the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention.

Eyes: Immediately flush with plenty of water for at least 15 minutes. If redness, itching or a burning sensation develops, have eyes examined and treated by medical personnel.

Ingestion: Give 1 or 2 glasses of water to drink and induce vomiting by sticking finger down throat. Repeat until vomitus is clear. Refer person to medical personnel. (Never give anything by mouth to an unconscious person.)

Inhalation: Remove person to fresh air. If cough or other respiratory symptoms develop, consult medical personnel.

Note to Physician: Vitamin K₁ is antidotal at doses of 10-20 mg combined with blood (or plasma) transfusions in cases of severe hemorrhage. Treatment should be continued until prothrombin times have stabilized at normal levels. Body half-life of brodifacoum is estimated to be 120 days in rats.

SECTION 7 SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Sweep up and recover or mix material with moist absorbent and shovel into waste container.

Disposal method: This material is toxic to fish and wildlife. Do not contaminate waterways by cleaning of equipment or by disposal of wastes. Treated effluent should not be discharged where it will drain into lakes, streams, or ponds. Discarded product is not a hazardous waste under 40 CFR 261.

Container disposal: Puncture or otherwise destroy empty container before disposal.

MONSANTO PRODUCT NAME

ROUNDUP® HERBICIDEMONSANTO COMPANY
800 N. LINDBERGH BLVD.
ST. LOUIS, MO 63167Emergency Phone No.
(Call Collect)
314-694-4000**PRODUCT IDENTIFICATION**

Synonyms: None.

Chemical Name: Not Applicable, Formulated Product

Active Ingredient: *Isopropylamine salt of glyphosate..... 41.0%

Inert Ingredients: 59.0%
100.0%

*Contains 480 grams per liter or 4 pounds of the active ingredient isopropylamine salt of N-(phosphonomethyl) glycine per U.S. gallon. Equivalent to 356 grams per liter or 3 pounds per U.S. gallon of the acid, glyphosate.

CAS Reg. No.: Not Applicable, Formulated Product

CAS Reg. No. Active Ingredient: 38641-94-0

EPA Reg. No.: 524-308

DOT Proper Shipping Name: Not Applicable

DOT Hazard Class/ I.D. No.: Not Applicable

DOT Label: Not Applicable

Reportable Quantity (RQ) Under Clean Water Act: Not Applicable

U.S. Surface Freight Classification: Weed Killing Compound, N.O.I.B.N.

The substance listed below is identified as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200):

Surfactant, about 15%. The specific chemical identity is withheld because it is trade secret information of Monsanto Company.

WARNING STATEMENTS

Keep out of reach of children.

WARNING!

CAUSES EYE IRRITATION

HARMFUL IF SWALLOWED

MAY CAUSE SKIN IRRITATION

NOT FOR REFORMULATION OR REPACKAGING

REC'D FEB 23 1994

Material Safety Data Sheet #262

May be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration

(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072



IDENTITY (As Used on Label and List)

Riverdale Tri-Power Selective Herbicide

Note: Blank spaces are not permitted. If any item is not applicable, or no
 information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name	Emergency Telephone Number
Riverdale Chemical Company	1-800-424-9300
Address (Number, Street, City, State, and ZIP Code)	Telephone Number for Information
425 West 194th Street	1-800-345-3330
Glenwood, Illinois 60425	Date Prepared
	1-15-91
	Signature of Preparer (optional)
	Riverdale Chemical Company

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Dimethylamine Salt of 2-Methyl-4-Chlorophenoxyacetic Acid CAS No. of Acid: 94-74-6	NA	NA	NA	40.42%
Dimethylamine Salt of 2-(2-Methyl-4-Chlorophenoxy)propionic Acid CAS. No of Acid: 93-65-2	NA	NA	NA	15.97%
Dimethylamine Salt of Dicamba (3,6-Dichloro-p-Anisic Acid) CAS No: 2300-66-5	NA	NA	NA	3.97%
Sodium Lignosulfonate CAS No: 68512-34-5	15mg/M ³ for dusts	15mg/M ³ for dusts	NA	0.5%
Water, CAS No: 007732-18-5	NA	NA	NA	39.14%

Under SARA Title III Sections 311/312 this product is classified as:

An immediate health hazard

A delayed health hazard

Section III — Physical/Chemical Characteristics

Boiling Point	Above 212°F	Specific Gravity (H ₂ O = 1)	1.140
Vapor Pressure (mm Hg.)	Equivalent to water	Melting Point	NA
Vapor Density (AIR = 1)	NA	Evaporation Rate (Butyl Acetate = 1)	NA

Solubility in Water

100% Soluble and dilutable with water.

Appearance and Odor

Dark Liquid, ammonia odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Aqueous solution, does not flash	Not determined	N.D.	N.D.

Extinguishing Media

Dry chemical, CO₂, foam. Water spray to cool.

Special Fire Fighting Procedures

Product will produce toxic and noxious fumes under extreme fire conditions.

Use self-contained breathing equipment in confined areas and in smoke or fumes.

Unusual Fire and Explosion Hazards

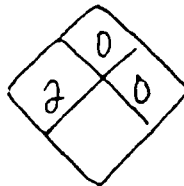
Drums of product will burst from steam pressure under extreme and prolonged

fire conditions.

(Reproduce locally)

OSHA 174, Sept. 1985

REC'D FEB 23 1994

**ELANCO**

H450

MATERIAL SAFETY DATA SHEET

SURFLAN® A.S.**ID5500/5949/5834;FN7153**

SURFLAN® A.S., aqueous suspension, is a preemergence surface-applied herbicide for the control of most annual grasses and certain broadleaf weeds.

I. MANUFACTURER/EMERGENCY INFORMATION**A. Manufacturer**

Elanco Products Company
A Division of Eli Lilly and Company
Lilly Corporate Center
Indianapolis, Indiana 46285

B. Emergency Telephone Numbers

Eli Lilly and Company (317) 276-2000
CHEMTREC (800) 424-9300

C. General Information Telephone Number

Elanco Products Company (317) 276-3000

D. Issued: 1/84; Revised: 10/85, 2/89**II. MATERIAL IDENTIFICATION****A. Generic Name**

Oryzalin 40.4%

1. Chemical Abstract Registry Number (CAS#): 19044-88-3

B. Chemical Name of Active Ingredient: 3,5-Dinitro-N⁴,N⁴-dipropylsulfanilamide**C. Other Ingredients**

Inert Ingredients 59.6%

There are no hazardous or carcinogenic inert ingredients.

III. PHYSICAL AND CHEMICAL PROPERTIES**A. Chemical Name of Active Ingredient: 3,5-Dinitro-N⁴,N⁴-dipropylsulfanilamide****B. Normal Physical State, Odor, Appearance: Bright orange opaque liquid with a slight aromatic odor.****C. Boiling Point (at 1 atmosphere): 212°F (100°C)****D. Vapor Pressure: Approximately 23 mm Hg at 25°C.****E. Specific Gravity: 1.138 to 1.239 at 25°C.****F. pH (aqueous 50/50): 5.0 to 6.8.****G. Solubility in Water: Miscible in water.****H. Vapor Density: 1.178 relative to air at 25°C.****I. Evaporation Rate: Not available.****IV. FIRE AND EXPLOSION HAZARD DATA****A. Auto-Ignition Temperature: Water based product.****B. Flashpoint: No ignition up to 200°F (93.3°C).****C. Explosive Limit**

1. Lower Explosive Limit (LEL): Water based product.

2. Upper Explosive Limit (UEL): Water based product.

D. Unusual Fire and Explosion Hazards: None known.**REC'D FEB 23 1994**

ERNY'S/THE ANDERSONS
MATERIAL SAFETY DATA SHEET

MSDS ID NO: E030

DATE PREPARED: 03/01/93

SECTION I: PRODUCT IDENTITY

PRODUCT NAME: Erny's 17-2-5 Liquid Fertilizer

MFR INFO: Erny's
P.O. Box 452
Walton, Indiana 46994

FOR EMERGENCY: (419) 537-7408

FOR INFORMATION: (800) 552-3769 IN INDIANA
(219) 626-2522 OUTSIDE INDIANA

DATE PRINTED: 03/16/93

SECTION II: COMPONENT INGREDIENT IDENTITY INFORMATION

COMPONENT	OSHA PEL	ACGIH TLV
Potash (CAS # 7447-40-7)		
Urea (CAS # 57-13-6)		
Ammonium polyphosphate (CAS # Not listed)		

REC'D FEB 23 1994

MANUFACTURER

SANDOZ AGRO, INC.
1300 East Touhy Avenue
Des Plaines, IL 60018
Emergency Phone: (708) 699-1616
Date issued: January, 1992
Supersedes: March, 1991

▶ 1. PRODUCT INFORMATION

Trade Name: BARRICADE® 65 WG HERBICIDE
Synonym: Prodiamine
Chemical Family: Dinitroaniline herbicide
Formula: $C_{13}H_{17}F_3N_4O_4$
CAS Registry Number: 29091-21-2
EPA Reg. No.: 55947-43

▶ 2. HEALTH/SAFETY ALERT

CAUTION: CAN CAUSE EYE IRRITATION, WEAR COVERALLS AND GLOVES WHILE USING THE PRODUCT. MIGHT CAUSE SKIN SENSITIZATION IN SOME PEOPLE. AVOID BREATHING DUST. READ THE LABEL.

▶ 3. FIRST AID PROCEDURES

Eye: Flush with water until clear. Contact a physician if irritation persists.

Skin: Wash with soap and water. Rinse thoroughly.

Ingestion: Drink 1 or 2 glasses of water. Induce vomiting by touching back of throat with finger or blunt object.

Inhalation: Remove the person to clear air.

IN ALL EMERGENCY SITUATIONS, CONTACT A PHYSICIAN.

▶ 4. NOTE TO PHYSICIAN

Treat symptomatically.

▶ 5. FIRE AND EXPLOSION HAZARD

Explosive Limits (% by Volume): Lower: N/A
Upper: N/A

Flammability: Not flammable

Flash Point: Does not flash

Extinguishing Media: Water spray, foam, dry chemical

Special Protective Equipment: In severe fire, wear protective clothing and use self contained breathing equipment.

Special Fire Fighting Procedures: None

Products of Combustion: Herbicide fumes, NO_x, HF, CO

Unusual Fire and Explosion Hazards: None

▶ 6. SPILL CONTROL AND CLEANUP

Steps to be taken: Carefully sweep up spilled material and put into a container and close it. Avoid breathing the dust.

Absorbents: None

Counteractants: None

Incompatibles: Oxidizing agents

▶ 7. PRODUCT/WASTE DISPOSAL

If possible, use collected material according to label directions. Otherwise, dispose of it at an approved chemical waste facility.

▶ 8. SPECIAL PRECAUTIONS

None. Handle in the same manner as any herbicide.

▶ 9. HEALTH HAZARD INFORMATION

Signs and Symptoms of Acute Overexposure: Eye irritation, possible skin sensitization.

Acute Toxicity:

Oral: (LD₅₀) rats—greater than 5,000 mg/kg.

Dermal: (LD₅₀) rats—greater than 2,000 mg/kg.

Inhalation: (LC₅₀)—undetermined, highest concentration that could be generated (1.80 mg/L) did not cause animal deaths.

Primary Route of Entry: Oral: No

Dermal: No

Inhalation: Yes

Carcinogen as determined by: NTP: Not listed

IARC: Not listed

OSHA: Not listed

Other Toxicological Information

Sensitizer: Mildly sensitizing

Skin Irritation: Non-irritating (rabbits)

Eye Irritation: Mildly irritating (rabbits)

Target Organ(s): None identified

▶ 10. RECOMMENDED GENERAL PRECAUTIONS

Storage: Store in original container, in a cool, dry area for herbicides.

Ventilation: Natural ventilation should suffice in storage.

Personal Protective Equipment: Wear protective clothing (coveralls and gloves) while handling this product.

▶ 11. PRODUCT INFORMATION—HAZARDOUS INGREDIENTS

NFPA Rating:

Health: 1

Fire: 1

Reactivity: 0

Special Properties: None

Exposure Limits:

OSHA PEL: Not determined

ACGIH TLV: Not determined

NIOSH Recommended Limit: Not determined

Hazardous Ingredients: Using definition of OSHA 29 CFR 1910.1200.

Component (chemical name, common name)	WT%
Prodiamine	65%
Non-hazardous ingredients	35%
	100%

▶ 12. PHYSICAL INFORMATION

Appearance and Odor: Yellow granules, bland odor

Boiling Point: N/A

Melting Point: 255°F/124°C

Vapor Pressure: less than 1 mm Hg

Vapor Density: N/A

Specific Gravity: N/A

Solubility: dispersable in water (mg/liter)

Evaporation Rate: N/A

Stability: Stable

Reactivity: Not reactive

Decomposition Products: N/A

▶ 13. REGULATORY REPORTING

SARA SECTION 311/312 HAZARD CATEGORIES:

Immediate Health: Yes (irritation)

Delayed Health: No

Fire: No

Sudden Pressure: No

Reactivity: No

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.

Barricade® 65 WG Herbicide is a registered trademark of Sandoz Ltd.

A-1253

REC'D FEB 23 1994

16-2-5, 18-2.25-5

Caution:

May cause eye & skin irritation

MARKCO CHEMICAL
a division of PureGro Corp
R.R. #4, 201 E. Benton St
Clinton, IL 61727
(217) 935-2178

PRODUCT INFORMATION

Chemical Name and Synonyms:

Liquid Urea Formaldehyde Resin

Trade Name and Synonyms:

Chemlawn Liquid Time-Release
Nitrogen Fertilizer (LTR-N)

Chemical Family:

Urea Formaldehyde

Formula:

Complex-N/A

CAS Number:

Not listed

Listed In: OSHA Subpart Z

 IARC Monograph

 ACGIH TLV List

 NTP List

 X None of the above

Typical Composition:

Total Nitrogen, as N

Total Phosphorous, as P_2O_5

Total Potassium, as K_2O

Z	%
16	18
2	2.25
5	5

PHYSICAL DATA

Boiling Point ($^{\circ}F$): 212 $^{\circ}F$

Vapor Pressure (mm Hg.): less than 1 @ 100 $^{\circ}F$

Vapor Density (Air=1): N/A

Solubility in Water: Infinite

Appearance and Odor: white liquid/slight aldehyde odor

pH: 7.4 - 7.8

Melting Point ($^{\circ}F$):

Specific Gravity ($H_2O=1$): 1.18

Percent. Volatile: 55%
By Volume (Z):

Evaporation Rate: N/A
(=1)

Other: 10.17 to 10.25 pounds/gal.

FIRE AND EXPLOSION HAZARD INFORMATION

Flash Point (Method Used): ASTM Method D-56

Extinguishing Media: water greater than 205 $^{\circ}F$ spray to keep containers cool

Special Fire Fighting Procedures: Essentially nonflammable

Unusual Fire and Explosion Hazards: None known

Flammable Limits: LEL N/A UEL N/A

IMPORTANT

CHEMLAWN APPLIES ONLY HIGHLY DILUTE SOLUTIONS OF THIS PRODUCT (USUAL

HEALTH INFORMATION

Threshold Limit Value: Not established

Toxicity: acute oral LD50 Dog greater than 5.9 grams/kg

acute oral LD50 female mice greater than 5.9 grams/kg

Effects of Overexposure:

Not generally considered toxic or hazardous. Prolonged exposure may cause slight skin irritation. Contact with eyes may cause irritation.

(N/A = Not Applicable)

17-2-6, 17-2-5

AMMONIUM UREA
a division of PureGro Comp
R.R. #4, 201 E. Benton St.
Clinton, IL 61727
(217) 935-2178

Caution:

No precautionary label information appropriate.

PRODUCT INFORMATION

Chemical Name and Synonyms:

Mixture of ammonium polyphosphate
solution, potassium chloride & urea

Trade Name and Synonyms:

Marco Liquid Fertilizer
(clear-green)

Chemical Family:

Ammonium, Potassium & Urea salts

Formula:

Not Available - Complex

CAS Number: Not Listed

Listed In: OSHA Subpart Z

ACGIH TLV List

NTP List

IARC Monograph

X None of the above

Typical Composition:

Total Nitrogen, as N 16
Total Phosphorous, as P_2O_5 2
Total Potassium, as K_2O 6
Balance - Water, trace impurities

Z %
16 17
2 2
6 5

PHYSICAL DATA

Boiling Point ($^{\circ}F$): Loses H_2O @ 212

Vapor Pressure (mm Hg.): N/A

Vapor Density (Air=1): N/A

Solubility in Water: , Complete

Appearance and Odor: Clear light green with little or no ammonia odor

pH: 6.7 to 7.0

Melting Point ($^{\circ}F$): -15

Specific Gravity ($H_2O=1$): 1.194

Percent. Volatile: N/A
By Volume (%):

Evaporation Rate: N/A
(=1)

Other: 9.83 to 9.96 pounds/gal.

FIRE AND EXPLOSION HAZARD INFORMATION

Flash Point (Method Used): N/A

Flammable Limits: LEL UEL
N/A N/A

Extinguishing Media: Use water to keep containers cool

Special Fire Fighting Procedures:

Wear full protective clothing, self-contained breathing apparatus.

Unusual Fire and Explosion Hazards:

Release ammonia & nitrous oxide fumes at very high temperatures.

IMPORTANT

HEALTH INFORMATION

Threshold Limit Value: None Established

Effects of Overexposure:

Eye - Irritant

Skin - None listed

Inhalation - (At high temps) causes irritation of mucous membranes, coughing or
difficult breathing.

Ingestion - None listed

CHEMLAWN APPLIES ONLY HIGHLY DILUTED SOLUTIONS OF THIS PRODUCT (USUAL
LESS THAN ONE-HALF OF ONE PERCENT
THEREFORE INFORMATION ON FIRE HAZARDS, HEALTH HAZARDS AND HANDLING
PRECAUTIONS MAY NOT APPLY TO THE DILUTED PRODUCT.



9032K
9033K

88:9K1

K2
K3

9021K 11, K12

9031K1

K3
K5

This Material Safety Data Sheet
complies with OSHA Hazard Communicati
Standard 29CFR 1910.1200

AMES METAL PRODUCTS CO.

PRODUCT: LEAD (FABRICATIONS/FORMS)

Solid form no powder

CODE: 3001

NO: 253

COMMON NAME OR SYNONYMS: Corroding, Chemical, Acid, Common Desilverized, Tellurium, & High Purity Grade Lead in the following forms:
wire, ingot, pig, pipe, anodes, cast or extruded bar, sheet, brick, wool, cane, tape, and miscellaneous
extruded lines.

SECTION I

MANUFACTURERS NAME: 4323 South Western Boulevard
Chicago, Illinois 60609
Phone 312-523-3230
FAX 312-523-3854
INFORMATION PHONE : Toll Free/Outside IL
EMERGENCY PHONE : 1-800-255-6937 CHEMTREC: 800-424-9300
PREPARATION DATE : January 1989

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OTHER	WT. PERCENT
Lead	7439-92-1	0.05 mg/m3	0.15 mg/m3	----	99.9+

Additional Information: OSHA Action Level for Lead 0.03 mg/m3 (See 29CFR 1910.1025)

SECTION III - PHYSICAL DATA

APPEARANCE & ODOR (AT NORMAL CONDITIONS) : Solid - Silver Metallic to Gray Metallic Metal - No Odor
SPECIFIC GRAVITY (H2O = 1) : 11.34
MELTING POINT (DEGREES C) : 328
BOILING POINT (DEGREES C) : 1744
SOLUBILITY IN WATER : Insoluble
EVAPORATION RATE (BUTYL ACETATE = 1) : Not Applicable
VAPOR DENSITY (AIR = 1) : Not Applicable
VAPOR PRESSURE (mmHg) : Not Applicable
FH : Not Applicable

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT : Non-Flammable
FLAMMABLE LIMITS : Not Applicable
EXTINGUISHING MEDIA : No specific agents recommended
SPECIAL FIRE FIGHTING PROCEDURES : If involved in fire, use full protective clothing and NIOSH/MSHA approved self-contained breathing
apparatus operated in a positive-pressure mode.
UNUSUAL FIRE & EXPLOSION HAZARDS : None

SECTION V - REACTIVITY DATA

STABILITY : Stable
REACTIONS TO AVOID : Not Applicable
INCOMPATIBILITY : Strong Oxidizers, Hydrogen Peroxide, Active Metals - Sodium, Potassium. Powdered lead fused with
ammonium nitrate may cause a violent reaction.
HAZARDOUS DECOMPOSITION PRODUCTS : At temperatures above the melting point lead oxide fumes may be evolved.

 SPC TECHNOLOGY * EMERGENCY/INFORMATION TELEPHONE
 4801 N. RAVENSWOOD AVE. * 312/907-5184
 CHICAGO, IL 60640-4496 *

MAIL TO:

 * FORMULA: DATE: 1/23/92
 * MSDS EFFECTIVE: 2/1/92 BY: J.L.
 * SUPERSEDES MSDS OF: 4/1/90

 DEAR CUSTOMER:

IN COMPLIANCE WITH THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA TITLE III, SECTION 313), FEDERAL HAZARD COMMUNICATIONS REGULATIONS (WHMIS AND OSHA 29 CFR 1910.1200) AND IN THE INTEREST OF INFORMED USE OF OUR PRODUCT, WE ARE PROVIDING YOU WITH THIS MATERIAL SAFETY DATA SHEET (MSDS).

THIS MSDS WILL BE UPDATED REGULARLY TO REFLECT THE MOST RECENT INFORMATION IN OUR POSSESSION. PLEASE ENSURE THAT OBSOLETE MSDS SHEETS IN YOUR FILES FOR THIS PART NUMBER ARE DISCARDED.

WE THANK YOU FOR YOUR CONTINUED PATRONAGE AND LOOK FORWARD TO PROVIDING YOU WITH ADDITIONAL QUALITY PRODUCTS AND SERVICES.

***** SECTION I - PRODUCT IDENTIFICATION *****

PART NUMBER: TLR
 PRODUCT NAME: ROSIN CORE SOLDER
 TRADE NAME/SYNONYMS: ENERGIZED ROSIN CORE SOLDER
 CHEMICAL FAMILY: WIRE CORE SOLDER

***** SECTION II - HAZARDOUS INGREDIENTS *****

INGREDIENT	CAS NO.	WT %	PEL	TLV	STEL	UNITS	LC50,PPM	LD50,MG/KG
Lead	#7439-92-1	30-60	0.05*	0.15*	N/A	MG/M3	N/A	N/A
Tin	7440-31-5	40-70	2.0	2.0	N/A	MG/M3	N/A	N/A
Rosin	8050-09-7	1-5	N/A	N/A	N/A	N/A	N/A	N/A

INGREDIENTS TOTAL WT% ARE BELOW 100% ONLY IF ALL OTHERS

UNLISTED ARE NOT CONSIDERED HAZARDOUS BY ANY FEDERAL, (OSHA, WHMIS, SARA), ANY STATE OR PROVINCE, OR LOCAL RIGHT-TO-KNOW REGULATIONS.

SYMBOLS, ABBREVIATIONS AND NOTATIONS:

N/A=NOT AVAILABLE OR APPLICABLE, C=CEILING LIMIT, S=SKIN DESIGNATION

#=LISTED IN SARA TITLE III SECTION 313, *=IF FOUND AS DUST, MIST OR FUME

M=HUMAN, RAB=RABBITS, GPG=GUINEA PIGS, MIC=MICE

I=INGESTION, A=SKIN ABSORPTION, LO=LITTLE OBSERVABLE EFFECT, NO=NO EFFECT

PEL=OSHA PERMISSIBLE EXPOSURE LIMIT, TLV=ACGIH THRESHOLD LIMIT VALUE

STEL=SHORT TERM EXPOSURE LIMIT, @ = AMONG THE 5 MOST PREDOMINANT SUBSTANCES.

**Ryerson**

an Inland Steel company

Material Safety Data Sheet**Section 1 - Product Identification**

Manufacturer's Name Various	Issue Date November 1, 1990
Product Name / Trade Name Brass Alloys	Common Name / Grade Half Hard, Free Cutting, Leaded Naval, Naval

Section 2 - Typical Chemical Composition (1)

Ingredient (2)	CAS No.	Wt. %	Permissible Air Level (3)	
			OSHA PEL	ACGIH TLV
Base Metal				
Copper (Cu)	7440-50-8	55-90	1.0	1.0
Alloying Elements				
Zinc (Zn)	7440-66-6	45.0	5.0	5.0 (Resp)
Lead (Pb)	7439-92-1	3.7	0.05(4)	0.15(4)
Tin (Sn)	7440-31-5	1.0	2.0 (5)	2.0 (6)
REMARKS: Basis for TLV: Cu - irritant properties ZnO Fume - prevention of metal fume fever			ZnO Dust - nuisance dust Pb - blood, CNS effects	

Section 3 - Physical Data

Material is (At Normal Conditions) Solid	Appearance And Odor Reddish-Brown Metal/No Odor
Melting Point (Base Metal) 1590 - 1900° F	Specific Gravity (H ₂ O = 1) 7.7-8.9

Section 4 - Fire - Explosion

Brass products in the solid state present no fire or explosion hazard.

Dust hazards exist under favoring conditions of small practice size. Dispersion in air and strong ignition source may result in an explosion.

Section 5 - Reactivity Data

Stable under normal conditions of use, storage and transportation.

Incompatible with mercury, ammonia, acetylene. Avoid exposure during storage to strong acids, bases or oxidizing agents.

Toxic gases, aerosols and vapors may be released in a fire involving copper alloys if fume of other compounds or other contacting materials are involved.

Section 6 - Health Hazard Information (See Section 2 for exposure limits.)**Health Effects / Signs and Symptoms:****Copper (Cu)**

Inhalation of Cu fumes may cause irritation of the eyes, nose, and throat and a flu-like illness called metal fume fever. Signs and symptoms of metal fume fever include fever, muscle aches, nausea, chills, dry throat, cough, and weakness. Cu fumes may also produce a metallic or sweet taste. Repeated or prolonged exposure to Cu fumes may cause discoloration of the skin and hair.

Zinc (Zn)

Subjecting zinc or alloys containing zinc to high temperatures (such as occurs during welding) will cause the formation of zinc oxide. Exposure to zinc oxide fumes or dusts can result in a flu-like illness called metal fume fever. Early symptoms may include a sweet or metallic taste in the mouth, dryness and irritation of the throat, and coughing. These symptoms may progress to shortness of breath, headache, fever, chills, muscle aches, nausea, vomiting, weakness, fatigue, and profuse sweating. The attack may last 6-48 hours and is more likely to occur after a period away from the job.

MATERIAL SAFETY DATA SHEET

Hazardous Material as Defined in 29 CFR 1910.1200 OSHA Limit

SECTION 1: COPPER ALLOY

C93200 High Leaded Tin Bronze

SECTION 2: ELEMENTS

Chemical Exposure Limits

Alloying Elements 1% or Greater

Element	CAS Number		(1984-1985) OSHA Limit 8-hr TWA	ACGIH 8-hr TWA
Copper	(7440-50-8)	(Dust)	1.0 mg/m ³	1.0 mg/m ³
		(Fume)	0.1 mg/m ³	0.2 mg/m ³
Lead	(7439-92-1)		0.05 mg/m ³	0.15 mg/m ³
Tin	(7440-31-5)		2 mg/m ³	2.0 mg/m ³
		(Inorganic, except oxides)		
Zinc	(7440-66-6)	(Fume)	5 mg/m ³	5.0 mg/m ³
Nickel	(7440-02-0)		1.0 mg/m ³	1.0 mg/m ³

SECTION 3: PHYSICAL DATA

Physical Form: Solid
Boiling Point: N/A
Freeze Melt Temperature: 1570° - 1790° F
Vapor Pressure: N/A
Evaporation Rate: N/A
Specific Gravity: 8.93
Density: .322 lb/in³
Solubility in Water: N/A
Color: Red
Odor: None

SECTION 4: FIRE AND EXPLOSION DATA

Flashpoint: N/A Auto Ignition Temp: N/A
Flammability Limits: N/A

In the solid form, there are no fire or explosion hazards with this alloy. Fine chips or dust may ignite and should be stored in a well-ventilated area. In case of fire, use extinguishing agents appropriate for the surroundings or materials. Dry chemicals or sand should be used to extinguish fires. Fire fighters should wear full protective clothing and where conditions warrant NIOSH-approved, self-contained breathing apparatus, see sections 6 and 7.

SECTION 5: REACTIVITY DATA

Copper alloys are stable under normal conditions of transport, use, and storage.

SECTION 6: HEALTH HAZARD DATA

Primary Routes of Entry: Inhalation of dust or fumes.

Under normal handling and use, exposure to the solid form of copper alloys presents few health hazards. Thermal cutting, melting, machining/grinding may produce fumes or dust containing the component elements, and breathing these fumes or dust may present significant health hazards. The exposure limits in Section 2 are relevant to fumes and dust.

COPPER: Fumes of copper may cause metal fume fever with flu-like symptoms, and may cause skin and hair discoloration.

LEAD - Short-Term Exposure: Lead is an accumulative poison. Inhalation effects of exposure to fumes or dust of inorganic lead may not develop quickly. Symptoms may include decreased physical fitness, fatigue, sleep disturbance, headache, aching bones and muscles, constipation, abdominal pains, and decreasing appetite. The effects are reversible and complete recovery is possible. Inhalation of large amounts of lead may lead to seizures, coma, and death.

LEAD - Long-Term Exposure: Long-term exposure to low levels can result in a build-up of lead in the body and more severe symptoms. Prolonged exposure may also result in kidney damage. Continuous exposure can result in decreased fertility, and exposure of the mother during pregnancy can cause birth defects.

TIN: Chronic overexposure to tin fumes may cause an apparent benign pneumoconiosis. This is called stannosis.

ZINC: Overexposure to zinc oxide fumes can cause "Metal Fume Fever."

NICKEL: Nickel dust and fumes can cause lung irritation, shortness of breath, coughing and wheezing.

SECTION 7: SPILL OR LEAK PROCEDURES

No special precautions are necessary for spills of bulk material. If large quantities of dust are spilled, remove by vacuuming or wet-sweeping to prevent heavy concentrations of airborne dust. Cleanup personnel should wear respirators and protective clothing. Scrap metal can be reclaimed for reuse. Follow Federal, State, and Local regulations regarding disposal.

SECTION 8: SPECIAL PROTECTION INFORMATION

Use general and local exhaust ventilation to keep airborne concentrations of dust and fumes below the TLV. When required, employees should wear OSHA- or NIOSH-approved respirators for protection against airborne dust or fumes. Approved safety glasses and/or goggles should be worn during any machining, grinding, cutting or other operation from which airborne particles may be emitted. Food or drink should not be consumed in the work area.

SECTION 9: SPECIAL PRECAUTIONS

Use good housekeeping practices to prevent accumulations of dust and to keep airborne dust concentrations at a minimum. Avoid breathing dust or fumes. Store dust away from source of ignition.

PLEASE FORWARD THIS DATA SHEET
TO THE APPROPRIATE COMPANY
SAFETY OFFICIALS!

ALUMINUM CASTING ALLOYS

319, 355, 356, 443, 535 & 713

(Prepared June 4 1998)

IDENTITY

TRADE NAME

Aluminum Association Registration Numbers

319.X (formerly AllCast), 355.X, 356.X, 444.X, 535.X (formerly Almag 35) & 713.X (formerly 613, Tenzalloy). Where X is 0 for castings, 1 or 2 for ingot

CHEMICAL NAME Mixture

PRODUCT Aluminum foundry Ingot and castings

CHEMICAL FAMILY Aluminum (Al) alloys containing Si, Fe, Cu, Mn, Mg, Cr, Ni, Zn, Ti, Be, Pb, and or Sr

SECTION IMANUFACTURERS NAME
Brumund Foundry Inc.EMERGENCY TELEPHONE NUMBER
(312) 287-9250
(800) 424-9300 - CHEMETRECADDRESS
'400-12 West Carroll Ave.
Chicago, Illinois 60624-1698TELEPHONE NUMBERS FOR INFORMATION
(312) 287-9250 FAX (312) 261-5855SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

PERCENT BY WEIGHT

MATERIAL		319	355	356	443	535	713
Aluminum	AL	Remainder	-----				
Beryllium	Be		0.003 max			0.003-0.007	
Chromium	Cr	0.10 max	0.25 max				0.35 max
Copper	Cu	3.0-4.0	1.0-1.5	0.4 max	0.15 max	0.05 max	0.4-1.0
Iron	Fe	1.0 max	0.6 max	0.6 max	0.8 max	0.10 max	0.8 max
Lead	Pb	0.15 max					
Magnesium	Mg	0.6 max	0.4-0.6	0.2-1.3	0.05	6.6-7.5	0.25-0.50
Manganese	Mn	0.5 max	0.5 max	0.35 max	0.35 max	0.1-0.25	0.6 max
Nickel	Ni	0.5 max	0.03 max				0.15 max
Silicon	Si	5.5-7.0	4.5-5.5	6.5-10.	4.5-6.0	0.10 max	0.25 max
Strontium	Sr	0.01 max		0.02 max			
Tin	Sn	0.1 max					
Titanium	Ti	0.03-0.25	0.05-0.25	0.03-0.25	0.25	0.1-0.25	0.1-0.25
Zinc	Zn	1.0 max	0.35 max	0.35 max	0.35 max		7.0-8.0

MSDS # H-001
K-1811H-001

Carbide Inserts

Date of Issue: 11/93
Supercedes: N/A
Date Prepared: 11/93

IDENTIFICATION

PRODUCT NAME: 218, 502, 569, 715, 816, 818, 4B, 6B, 10F, 12C, 15C, 15F, 12Y, A, A6, A9, A12, A15, A20, A25, A30, B, BB, B10, B20, B30, B50, B55, B30SG, B50SG, CF2, CG4, CM5, CS3, CS5, G10, G13, G16, G20, G30, G40, G55, GE10, GE30, GE50, GE55, GU1, GU2, HD15, HD20, HD25, KF1, KMF, KMH, KMX, KO3, KO5, MMT1, MMT2, MN1, MN2, MN3, MN4, MN5, MN6, PWX

CHEMICAL NAME: Tungsten Carbide with Cobalt binder

CHEMICAL FAMILY: Refractory Metal Carbide

SYNONYMS: Hard Metal, Cemented WC, Tungsten Carbide

MOLECULAR FORMULA: Mixture

INGREDIENTS

MATERIAL	CAS NUMBER	% BY WEIGHT	OSHA PEL-TWA (mg/m ³)	ACGIH TLV-TWA (mg/m ³)	NFPA HAZARD RATING SCALE 0 - 4		
					HEALTH	FIRE	REACTIVITY
Tungsten Carbide	12070-12-1	70-98	5	5	No NFPA Rating	0	0
*Cobalt	7440-48-4	2.0-30.0	0.05	0.05	1	3	0

* Identifies substances that are subject to the requirements of Section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

PHYSICAL DATA

DESCRIPTION
Gray powder or solid

SPECIFIC GRAVITY (H₂O = 1)
12 to 15.5

SOLVENT SOLUBILITY
Practically insoluble

BOILING POINT
2870°C (5198°F)

**VAPOR DENSITY (AIR = 1)
AT AMBIENT TEMP.**
Not measurable

**PERCENT VOLATILES
BY VOLUME**
Negligible

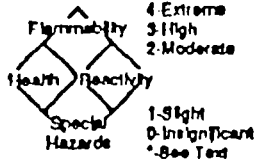
MELTING POINT
1495°C (2723°F)

SOLUBILITY IN WATER
Practically insoluble

EVAPORATION RATE
Not measurable

◆ ◆ ◆ EMERGENCY PHONE NUMBERS ◆ ◆ ◆
CHEMTREC 800-424-9300

MATERIAL SAFETY DATA SHEET

24-HOUR EMERGENCY ASSISTANCE	GENERAL ASSISTANCE	NEPA FIRE HAZARD SYME
BP America (In Ohio): 800-362-8059 (Outside Ohio): 800-321-8642 CHEMTREC Asslst: 800-424-9300	514-742-5911	
MSDS Number > CF8		

MANUFACTURER: Quebec Metal Powders Limited
ADDRESS: 1655 Marie-Victorin, Tracy, Quebec, Canada J3R 4R4

PRODUCT IDENTIFICATION

TRADE NAME: ATOMET 29 *, powdered centered metal type Blank*

CAS NUMBER: 7439-89-6

SYNONYM(S): REDUCED IRON POWDER

CHEMICAL FAMILY: Metals

MOLECULAR FORMULA: Fe

MOLECULAR WEIGHT: 55.8

PRODUCT CODE: NA

HIERARCHY: NA

PRODUCT HAZARD SUMMARY

HEALTH

CAUTION!

MAY BE HARMFUL IF SWALLOWED OR INHALED

MAY BE IRRITATING TO THE SKIN, EYES AND RESPIRATORY TRACT

REACTIVITY

STABLE

PRODUCT HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE

INGESTION:

Not a normal route of exposure. However, if ingested it may cause gastrointestinal disturbances. Symptoms may include metallic taste, thirst, abdominal pain, seizures, vomiting and bloody diarrhea. May also cause lethargy, irritability, increased cardiac and respiratory rates, metabolic acidosis, shock, hepatic failure, jaundice, pancreatic injury, cirrhosis of the liver, vascular collapse and death.

SKIN:

Repeated or prolonged contact may cause irritation due to abrasion.

F.16

MATERIAL SAFETY DATA SHEET (MSDS)
 SC-000-057 REV. 2 DATE 8-1-91 CODE 24-4
 CONFORMS TO REQUIREMENTS OF OSHA STANDARD 1910.1200
 "HAZARD COMMUNICATION" AND TO VARIOUS STATE
 "EMPLOYEE RIGHT TO KNOW" LAWS

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 SECTION I PRODUCT IDENTIFICATION

This MSDS supplied for: ALUMINUM CASTINGS-700 SERIES

VENDOR NAME AND ADDRESS: Precision Enterprises, Inc.

Div of Duro Cast, Inc.
 145 W. Market St.

EMERGENCY PHONE NUMBER: Somonauk, IL 60552
 815-498-2317

FIRE HAZARD CLASS: HEALTH: 0 FIRE: 1 REACTIVITY: 1
 THE 4TH DIAMOND:

ANSI: CAUTION! DUST AND CHIPS WILL BURN WITH A HOT FLAME. FUMES FROM THIS CASTING MAY CAUSE METAL FUME FEVER. NICKEL COMPOUNDS AND HEXAVALENT INSOLUBLE CHROMIUM HAVE BEEN FOUND TO BE CARCINOGENS IN LABORATORY ANIMALS.

 SECTION II - HAZARDOUS COMPONENTS

INGREDIENT	CAS NO.	PERCENT	TLV	PEL
Aluminum**	7429-90-5	Balance	10 mg/cu.m	N/E
Chromium*	7440-47-3	0.06-0.60	0.5 mg/cu.m	1 mg/cu.m
Chromium (hexavalent)			0.05 mg/cu.m	N/E
Copper*	7440-50-8	0.10-1.0	0.2 mg/cu.m	0.1 mg/cu.m
			as fume	as fume
			1 mg/cu.m	1 mg/cu.m
			as dust	as dust
Iron	7439-89-6	0.10-1.4	5 mg/cu.m	10 mg/cu.m
			as iron fume	
Manganese*	7439-96-5	0.05-0.60	C 5 mg/cu.m	C 5 mg/cu.m
			as dust	as dust
			1 mg/cu.m	
			as fume	
Magnesium	7439-95-4	0.3-2.4	10 mg/cu.m	15 mg/cu.m
Nickel*	7440-02-0	<0.15	1 mg/cu.m	1 mg/cu.m
Silicon	7440-21-3	0.2-0.3	10 mg/cu.m	15 mg/cu.m
Titanium	7440-32-6	0.11-0.25	10 mg/cu.m	15 mg/cu.m
			as titanium oxide	
Zinc**	7440-66-6	2.70-8.0	5 mg/cu.m	5 mg/cu.m
			as oxide fume	

=====

N/E means none established.

N/A means not applicable.

N/D means no data available.

1005 B

71-548 All info
provided

MATERIAL SAFETY DATA SHEET

Spectrulite Consortium Inc.
College and Weaver Streets
Madison, Illinois 62060

Contact: Technical Dept.
Emergency Phone: 618-452-5190

Page: 1

PRODUCT NAME: PRC MAGNESIUM PLATES

MSDS Code No: M-33
Effective Date: 12/31/87

1. COMPOSITION:

BASE METAL NOMINAL COMPOSITION:

MAGNESIUM	CAS# 007439-95-4	96%
ALUMINUM	CAS# 007429-90-5	3%
ZINC	CAS# 007440-66-6	1%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

PHYSICAL AND CHEMICAL DATA:

BOILING POINT: 2000°F, 1079°C
VAP. PRESSURE: NIL (mmHg @ 20C, 68F)
SOL. IN WATER: NIL
SP. GRAVITY: 1.77
VAP. DENSITY: Burns in air
APPEARANCE: Silvery white metal coated with a photoresist.
ODOR: Not available.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: Ignites and burns @ melting point, approx. 1200F (649C).
METHOD USED: Not applicable

FLAMMABLE LIMITS:

LFL: Not applicable
UFL: Not applicable

EXTINGUISHING MEDIA: Approved extinguishing powder for magnesium fires such as "G-1 Powder" made by Fyr-Fyter, Inc., P.O. Box 2752, Newark, NJ 07114 or dry, clean iron chips.

FIRE & EXPLOSION HAZARDS: Do not put liquids on magnesium fires. Application of water could cause explosion.

FIRE FIGHTING EQUIPMENT: Not available.

(Continued on Page 2)

REC'D FEB 01 1994



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Inland Steel Industries, Inc.

Material Safety Data Sheet

ALUMINUM



SECTION 1 – Product Identification

Distributor: Joseph T. Ryerson & Son, Inc.

Emergency Telephone: 312-762-2121

Address: 2621 W. 15th Place
Chicago, Illinois 60608

Chemical Name and Synonyms: ALUMINUM ALLOY

Chemical Family: Metals

Formula: Not Applicable

SECTION 2 – Product Description and Hazardous Ingredients/Identity Information

See Chart Inside For Listing

SECTION 3 – Physical Data

Melting Point F (C): Wide Range – 900-1200 (482-649)

Vapor Pressure: Not Applicable

Vapor Density (Air = 1): Not Applicable

Solubility in Water: Negligible

Appearance and Odor: Grayish to silvery odorless sheet, strip, plate, bar, structural shapes, pipe and tubing and extrusions.

Specific Gravity (H₂O = 1): Greater Than 3

% Volatile by Volume (%): Not Applicable

Evaporation Rate: Not Applicable

SECTION 4 – Fire and Explosion Hazard Data

Flash Point F (C): Not Applicable

Flammable Limits: Not Applicable

Extinguishing Media: Use methods applicable to surrounding area.

Unusual Fire and Explosion Hazards: None

Special Fire Fighting Procedures: Use self-contained breathing apparatus for protection against degradation products and fire fighting technique or agent(s) applicable to surrounding materials. Small chips, fine turnings, and dust may ignite readily. Use coarse water spray on chips, turnings, etc. Use class D extinguishing agents or dry sand on fines. Do not use halogenated extinguishing agents on small chips or fines. Dust clouds may be explosive. Molten aluminum may explode on contact with water.

DISCLAIMER

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[illegible]

REC'D FEB 01 1994



Material Safety Data Sheet

STEEL



SECTION 1 – Product Identification

Distributor: Joseph T. Ryerson & Son, Inc.

Address: 2621 W. 15th Place
Chicago, Illinois 60608

Chemical Name and Synonyms: STEEL

Chemical Family: Metals

Formula: Not Applicable

Emergency Telephone: 312-762-2121

SECTION 2 – Product Description and Hazardous Ingredients/Identity Information

See Chart Inside For Listing

SECTION 3 – Physical Data

Melting Point F (C): Greater Than 2800 (1540)

Vapor Pressure: Not Applicable

Vapor Density (Air = 1): Not Applicable

Solubility in Water: Negligible

Appearance and Odor: Grayish to silvery odorless sheet, strip, plate, bar, structural shapes, pipe and tubing.

Specific Gravity (H₂O = 1): Greater Than 7

% Volatile by Volume (%): Not Applicable

Evaporation Rate: Not Applicable

SECTION 4 – Fire and Explosion Hazard Data

Flash Point F (C): Not Applicable

Extinguishing Media: Use methods applicable to surrounding area.

Special Fire Fighting Procedures: Use self-contained breathing apparatus for protection against degradation products and fire fighting technique or agent(s) applicable to surrounding materials.

Flammable Limits: Not Applicable

Unusual Fire and Explosion Hazards: None

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* Steel products may be coated with petroleum oils to meet customer specifications. Information relative to specific coatings may be obtained from Ryerson.

REC'D FEB 01 1994



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Material Safety Data Sheet

STAINLESS



SECTION 1 – Product Identification

Distributor: Joseph T. Ryerson & Son, Inc.

Emergency Telephone: 312-762-2121

Address: 2621 W. 15th Place
Chicago, Illinois 60608

Chemical Name and Synonyms: STAINLESS STEELS

Chemical Family: Metals

Formula: Not Applicable

SECTION 2 – Product Description and Hazardous Ingredients/Identity Information

See Chart Inside For Listing

SECTION 3 – Physical Data

Melting Point F (C): Greater Than 2550 (1400)

Specific Gravity (H₂O = 1): Greater Than 7

Vapor Pressure: Not Applicable

% Volatile by Volume (%): Not Applicable

Vapor Density (Air = 1): Not Applicable

Evaporation Rate: Not Applicable

Solubility in Water: Negligible

Appearance and Odor: Grayish to silvery odorless sheet, strip, plate, bar, structural shapes, pipe and tubing.

SECTION 4 – Fire and Explosion Hazard Data

Flash Point F (C): Not Applicable

Flammable Limits: Not Applicable

Extinguishing Media: Use methods applicable to surrounding area.

Unusual Fire and Explosion Hazards: None

Special Fire Fighting Procedures: Use self-contained breathing apparatus for protection against degradation products and fire fighting technique or agent(s) applicable to surrounding materials.

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7440-21-3 7440-47-3 7440-02-0

ALLOY ELEMENTS

METAL

CAS NUMBER:

7438-38-8

GRADE

GRADE	CAS NUMBER:	METAL	7438-38-8	7438-38-5	7440-44-0	7725-14-0	7704-34-9	7782-74-4	7782-48-2	7440-25-7	7440-03-1	7440-50-8	7440-02-2	7438-06-7	7772-77-8	7440-32-8	7440-35-7
308Z		Iron															
303			>85	>85	<0.1	<0.1	<0.1	<1.0	<1.0						<0.1		
304			>87	>87	<0.1	<0.1	<0.1	<1.0	<1.0								
304L			>86	>86	<0.1	<0.1	<0.1	<1.0	<1.0								
309S			>84	>84	<0.1	<0.1	<0.1	<1.0	<1.0								
316			>87	>87	<0.1	<0.1	<0.1	<1.0	<1.0								
316L			>87	>87	<0.1	<0.1	<0.1	<1.0	<1.0								
318			>87	>87	<0.1	<0.1	<0.1	<1.0	<1.0								
318L			>87	>87	<0.1	<0.1	<0.1	<1.0	<1.0								
317L			>87	>87	<0.1	<0.1	<0.1	<1.0	<1.0								
321			>85	>85	<0.1	<0.1	<0.1	<1.0	<1.0								
321L			>85	>85	<0.1	<0.1	<0.1	<1.0	<1.0								
327			>85	>85	<0.1	<0.1	<0.1	<1.0	<1.0								
327L			>85	>85	<0.1	<0.1	<0.1	<1.0	<1.0								
410S			>74	>74	<0.1	<0.1	<0.1	<1.0	<1.0								
416			>79	>79	<0.1	<0.1	<0.1	<1.0	<1.0								
422			>77	>77	<0.1	<0.1	<0.1	<1.0	<1.0								
440C			>84	>84	<0.1	<0.1	<0.1	<1.0	<1.0								
444C			>84	>84	<0.1	<0.1	<0.1	<1.0	<1.0								
430			>75	>75	<0.1	<0.1	<0.1	<1.0	<1.0								
TRADE NAMES																	
Nitronic 30			>88	>88	<0.2	<0.1	<0.1	<1.0	<1.0								
Nitronic 30S			>84	>84	<0.1	<0.1	<0.1	<1.0	<1.0								
Nitronic 30L			>84	>84	<0.1	<0.1	<0.1	<1.0	<1.0								
PH 15-5			>70	>70	<0.1	<0.1	<0.1	<1.0	<1.0								
PH 17-4			>74	>74	<0.1	<0.1	<0.1	<1.0	<1.0								
PH 13-8 Mo			>75	>75	<0.1	<0.1	<0.1	<1.0	<1.0								
ALLOY 20			>30	>30	<0.1	<0.1	<0.1	<1.0	<1.0								
2206																	

Compositions and Exposure Limits (mg/m ³)	Aluminum	Carbon	Chromium	Columbium	Copper	Iron	Manganese	Molybdenum	Nickel	Phosphorus	Selenium	Silicon	Sulfur	Tantalum	Titanium	Tungsten	Vanadium
As Welding Fume	5	Not Listed	As Metal Chromium II and Chromium III Compounds and Chromium Acid Chloride	Not Listed	As Copper 1.0 As Copper 0.1	As Total Phosphorus 10 As Fe 5	As Manganese 5 As Sc 5 As Magnesium 1.5	As Soluble Mo Compounds 5 As Insoluble Mo Compounds 10	As Metal Ni Compounds 0.1 As Soluble Ni Compounds 0.1	As Phosphorus (yellow) 0.1	As Metal 0.2	10.5 resp. 10	As Sulfur 5.12 As Sulfur 5.12	Metal Oxide 5	10.5 resp. 10	Metal Soluble W Compounds Insoluble W Compounds 5	As Vanadium 0.05 resp. 1.0 As Vanadium 0.05 resp. 1.0 As Vanadium 0.05 resp. 1.0

KLOSTER STEEL CORPORATION

MATERIAL SAFETY DATA SHEET

SECTION I

DATE January 1, 1994

KLOSTER STEEL CORPORATION	EMERGENCY TELEPHONE NO. (312) 421-3450
ADDRESS (NUMBER, STREET, CITY, STATE & ZIP CODE) 224 N. Justine Street, Chicago, Illinois 60607	
PRODUCT NAME Tool Steels	CHEMICAL FAMILY Steel
GRADES Carbon (Water Hardening), Cold Work Die, Cold Work (Air Hardening), High Speed, Hot Work, Mold, Oil Hardening, Shock Resisting, Special Purpose.	

SECTION II - CHEMICAL COMPONENTS

	C.A.S. NUMBER	RANGE %	TLV (UNITS)	OSHA PEL
Iron (limits for iron oxide fume)	1309-37-1	50-98	5 mg/m ³	10 mg/m ³
Tungsten	7440-33-7	0-19	5 mg/m ³	None Listed
Chromium	7440-47-3	0-14	0.5 mg/m ³	1 mg/m ³
Cobalt	7440-48-4	0-12	0.1 mg/m ³	0.1 mg/m ³
Molybdenum	7439-98-7	0-9	5 mg/m ³	5 mg/m ³
Nickel	7440-02-0	0-5	1 mg/m ³	1 mg/m ³
Vanadium (limits for dust)	1314-62-1	0-5	0.5 mg/m ³	0.5 mg/m ³
(limits for fume)			0.5 mg/m ³	0.1 mg/m ³
Manganese (limits for dust)	7439-96-5	0-3	5 mg/m ³	5 mg/m ³
(limits for fume)			1 mg/m ³	None Listed
Silicon	7440-21-3	0-3	None Listed	None Listed
Carbon	1333-86-4	0-3	3.5 mg/m ³	3.5 mg/m ³

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H ₂ O = 1)	8
VAPOR PRESSURE (MM HG.)	N/A	PERCENT VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR = 1)	N/A	EVAPORATION RATE (_____ = 1)	N/A
SOLUBILITY IN WATER	N/A	MELTING POINT	2600-2800°F
APPEARANCE & ODOR	Metallic and odorless solid		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	N/A	FLAMMABLE LIMITS	N/A	LEL	UEL
EXTINGUISHING MEDIA	N/A				
SPECIAL FIRE FIGHTING PROCEDURES	N/A				
UNUSUAL FIRE EXPLOSION HAZARDS	N/A				

N/A = NOT APPLICABLE
UN = UNKNOWN

PAGE 1 (CONTINUED ON REVERSE SIDE)

REC'D FEB 01 1994



MATERIAL SAFETY DATA SHEET

REC'D FEB 23 1994

K-0963-002 (3/91)
SUPERCEDES: 3/90

DATE PREPARED

IDENTIFICATION

PRODUCT NAME: K1, K2S, K2S-M, K4H, K4H-M, K5H, K6, K6-M, KMN-10, K21, K21-M, K29, K40, K45, K45-M, K84, K86, K90, K91-M, K92, K94, K95, K96, K96-M, K400, K420, K600, K2884, K2885, K3, K8735, KC210, KC250, KC800, KC810, KC820, KC850, KC910, KC950, KT101, K-ALL, KM, KWH-M, HG-100, SP139, SP145 Pins, SP240, SP266, SP278, SP291, SP316, Cycloid, Gri Media, Kengrit, S Pellets, TS181B,

CHEMICAL NAME: Tungsten Carbide with Cobalt binder

CHEMICAL FAMILY: Refractory Metal Carbide

SYNONYMS: Hard Metal, Cemented WC, Tungsten Carbide

MOLECULAR FORMULA: Mixture

INGREDIENTS

MATERIAL	C.A.S. NUMBER	% BY WEIGHT	OSHA TLV-TWA (mg/m ³)	ACGIH TLV-TWA (mg/m ³)	NFPA HAZARD RATING SCALE 0-4		
					HEALTH	FIRE	REACTIVITY
Tungsten Carbide	12070-12-1	30.0-97.7	5	5	No NFPA Rating	0	0
*Cobalt	7440-48-4	2.0-25.0	0.05	0.05	1	3	0
Tantalum Carbide	12070-06-3	0.1-15.0	5	5	No NFPA Rating	0	0
Titanium Carbide	12070-08-5	0.1-15.0	5	None Established	No NFPA Rating	0	0
Niobium Carbide	12069-94-2	0.1-5.0	5	5	No NFPA Rating	0	0

* Identifies substances that are subject to the requirements of Section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

PHYSICAL DATA

DESCRIPTION Gray powder or solid	RELATIVE DENSITY (H₂O = 1) 9.5 to 15.5	SOLVENT SOLUBILITY Practically insoluble
BOILING POINT 2870°C (5198°F)	VAPOR DENSITY (AIR = 1) AT AMBIENT TEMP. Not measurable	PERCENT VOLATILES BY VOLUME Negligible
MELTING POINT 1495°C (2723°F)	SOLUBILITY IN WATER Practically insoluble	EVAPORATION RATE Negligible

EMERGENCY PHONE NUMBER

Chemtrec 800-424-9300

Kennametal Inc. • P.O. Box 231, Latrobe, PA 15650 • Phone 412-539-5000

MAR 3 1984

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet is principally directed to managerial, safety, hygiene and medical personnel. It is intended as a starting point for the development of health and safety procedures.

This Material Safety Data Sheet (MSDS) meets the requirements of the Federal OSHA Hazard Communications Standard (29 CFR 1910.1200).

SECTION I. PRODUCT IDENTIFICATION

MATERIAL NAME:	ALUMINUM
CHEMICAL FAMILY:	Metal
CHEMICAL NAME AND SYNONYMS:	Not applicable
FORMULA:	Not applicable

SECTION II. HAZARDOUS INGREDIENTS

NAME	CAS#	TLV	PEL	PERCENT
Aluminum (Al)	7429-90-5	5	10	min. 93.0
Silicon (Si)	7440-21-3	5	10	max. 1.8
Iron (Fe)	7439-89-6	5	10	max. 1.0
Copper (Cu)	7440-50-8	0.2	1	max. 1.2
Manganese (Mn)	7439-90-5	1	5c	max. 1.1
Magnesium (Mg)	7439-95-4	10		max. 1.5
Zinc (Zn)	7440-66-6	5	5	max. 2.4
Chromium (Cr)	7440-47-3			max. .35

SECTION III. PHYSICAL DATA

BOILING POINT, degrees F:	Not applicable
VAPOR PRESSURE, 68 deg. F mm. Hg:	Nil
VAPOR DENSITY (Air = 1):	Not applicable
SOLUBILITY IN WATER:	Not applicable
APPEARANCE AND ODOR:	Grey to silver metallic color. No odor.
SPECIFIC GRAVITY (Water = 1):	2.5 to 2.9
MELTING POINT (Wide range):	870 to 1453 deg. F.
EVAPORATION RATE (Ether = 1):	Not applicable
FLASH POINT, degrees F:	Not applicable
(Method used)	Not applicable
FLAMMABLE LIMITS IN AIR, % LEL:	Not applicable
UEL:	Not applicable

MATERIAL SAFETY DATA SHEET

***** SECTION I *****

MANUFACTURER NAME

EEZ PRODUCTS DIVISION
MULLEN CIRCLE BRAND, INC.
3514 WEST TOUHY AVENUE
CHICAGO, ILLINOIS 60645

EMERGENCY PHONE NUMBER

708-676-1880

REVISION DATE 12/91

TRADE NAME TUF TAP

CHEMICAL FAMILY PETROLEUM

FORMULA 2-15-T

***** SECTION II - HAZARDOUS INGREDIENTS *****

INGREDIENT

PERCENT

TLV/PEL/STEL

PETROLEUM OIL 1.0%+ 5 MG/CUBIC METER (MIST)
(HAZARDOUS ONLY IF MISTED)

NOT A CARCINOGEN

OSHA HAZARD CLASSIFICATION (29CFR1910.1200): NONE

D.O.T. SHIPPING CLASSIFICATION (49CFR172) : PETROLEUM OIL, NOIBN

***** SECTION III - PHYSICAL DATA *****

APPEARANCE & ODOR : BEIGE PASTE; MILD PETROLEUM ODOR
SPECIFIC GRAVITY, 60 F : .91
BOILING POINT, F : 500
MELTING POINT, F : 130
VAPOR DENSITY (AIR=1) : HEAVIER
SOLUBILITY IN WATER : SLIGHT
PERCENT VOLATILE BY VOLUME: NONE
EVAPORATION RATE (WATER=1): NOT APPLICABLE

***** SECTION IV - FIRE & EXPLOSION DATA *****

FLASH POINT, F (METHOD) : 350 MINIMUM (C.O.C.)
FLAMMABLE LIMITS : NOT APPLICABLE
EXTINGUISHING MEDIA : FOAM, CARBON DIOXIDE, DRY CHEMICALS,
WATER FOG OR MIST.
FIRE FIGHTING PROCEDURES: KEEP EXPOSED CONTAINERS COOL. FIRE
FIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

***** SECTION V. - HEALTH HAZARD DATA *****

EFFECTS OF OVEREXPOSURE:

NO SIGNIFICANT HEALTH EFFECTS ARE EXPECTED UPON SHORT TERM
EXPOSURE TO SKIN AND EYES. PROLONGED OR REPEATED EXPOSURE MAY
CAUSE MILD SKIN AND EYE IRRITATION. INHALATION OF HIGH VAPOR
CONCENTRATIONS MAY CAUSE NAUSEA AND BREATHING DIFFICULTIES.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: FLUSH IMMEDIATELY WITH COOL, CLEAN WATER FOR 15 MINUTES.
SKIN: REMOVE BY WIPING. WASH WITH MILD SOAP AND WATER.
INHALATION: REMOVE TO FRESH AIR. IF BREATHING IS STOPPED, START
ARTIFICIAL RESPIRATION. NEVER GIVE ANYTHING BY MOUTH TO AN
UNCONSCIOUS PERSON. WASH CLOTHING THOROUGHLY BEFORE REUSE. IF
IRRITATION DEVELOPS OR PERSISTS, SEE A PHYSICIAN.



MATERIAL SAFETY DATA SHEET

PRODUCT: RUSTLICK EDM-250

DATE: 8/2/93

COMMON NAME: EDM OIL

EMERGENCY NUMBER: 508-777-1100

SECTION I — IDENTIFICATION

CHEMICAL NAME: N/A Mixture - No C.A.S. Number

CHEMICAL FAMILY: Petroleum Hydro Carbons

D.O.T. HAZARD CLASSIFICATION: None

SECTION II — INGREDIENTS, INERT OR HAZARDOUS

MATERIAL	C.A.S. #	%	TLV*	PEL**
Non Hazardous Ingredients Composition of Product is Proprietary				
For Further Information Write:				
	Devcon Corp.			
	30 Endicott Street			
	Danvers, MA 01923			

Attn: Safety Department

CARCINOGENIC ASSESSMENT — None

SECTION III — PHYSICAL DATA

A. Boiling Point: 470°F

B. Melting Point: NA

C. Evaporation Rate: (Buac=1) <.1

D. Solubility in Water: Insoluble

E. Appearance: Colorless Liquid

F. Volatile by Weight: NA

G. Specific Gravity: >.75

H. Vapor Pressure: (mm Hg) <.1

I. Vapor Density: (air=1) >5

G. Odor: None

SECTION IV — FIRE AND EXPLOSION DATA

A. Flash Point: 244°F PMCC

* Cool exposed containers with water.

B. Extinguishing Media: Foam, Dry, Chemical, CO₂ AVOID: Excessive inhalation

C. Hazardous Decomposition Products: Oxides of Carbon

D. Firefighting Procedures: Use Self Contained Breathing Equipment in Confined Area *

E. Unusual Fire and Explosion Data or Hazardous: Do not store or mix with strong oxidants
(I.E. - Liquid Chlorine or Liquid Oxygen)

SECTION V — HEALTH HAZARD DATA

A. Primary Route(s) of Entry:

B. Effects of Overexposure:

1. Eyes - Irritation

2. Breathing - Unlikely

3. Swallowing - N/A

4. Skin - Irritation

No known chronic effects

C. First Aid:

1. Eyes - Flush with clean water

2. Breathed, Swallowed or Skin: Unlikely, N/A, Wash with Soap & Water

3. Medical Conditions Recognized as possibly aggravated by Exposure:

Skin disorders may be aggravated by prolonged or repeated contact.

REC'D FEB 01 1994

600668-00 MOBIL VELOCITE OIL NO. 6

MOBIL OIL CORPORATION MATERIAL SAFETY DATA BULLETIN

REVISED:06/22/93

***** I. PRODUCT IDENTIFICATION *****
 MOBIL VELOCITE OIL NO. 6
 SUPPLIER: 24-HOUR EMERGENCY (CALL COLLECT):
 MOBIL OIL CORP. (609) 737-4411
 CHEMICAL NAMES AND SYNONYMS: CHEMTREC:
 PET. HYDROCARBON AND ADDITIVES (800) 424-9300
 USE OR DESCRIPTION: PRODUCT AND MSDS INFORMATION:
 SPINDLE OIL (800) 662-4525

***** II. TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *****

APPEARANCE: Light Amber Liquid ODOR: Mild PH: NA
 VISCOSITY AT 40 C, CS: > 8.9
 VISCOSITY AT 100 C, CS: 2.6
 FLASH POINT F(C): > 310(154) (ASTM D-92)
 MELTING POINT F(C): NA POUR POINT F(C): 30(-1)
 BOILING POINT F(C): > 600(316) VOC: < 10.00(Wt. %); 0.707 lbs/gal
 RELATIVE DENSITY, 15/4 C: 0.848 SOLUBILITY IN WATER: Negligible
 VAPOR PRESSURE-mm Hg 20C: < 0.1

NA=Not Applicable NE=Not Established D=Decomposes
 FOR FURTHER INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE.

***** III. POTENTIALLY HAZARDOUS INGREDIENTS *****
 Low viscosity oils have been associated with skin irritation.
 (See Section IV.)

See Sections XII and XIII for regulatory and further compositional data.

***** IV. HEALTH HAZARD DATA *****
 --- INCLUDES AGGRAVATED MEDICAL CONDITIONS, IF ESTABLISHED ---
 THRESHOLD LIMIT VALUE: 5.00 mg/m3 Suggested for Oil Mist
 EFFECTS OF OVEREXPOSURE: Prolonged repeated skin contact with low
 viscosity materials may defat the skin resulting in possible
 irritation and dermatitis.

***** V. EMERGENCY AND FIRST AID PROCEDURES *****
 --- FOR PRIMARY ROUTES OF ENTRY ---
 EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a
 physician.
 SKIN CONTACT: Wash contact areas with soap and water. Remove
 contaminated clothing. Launder contaminated clothing before reuse.
 INHALATION: Remove from further exposure. If respiratory irritation,
 dizziness, nausea, or unconsciousness occurs, seek immediate medical
 assistance and call a physician. If breathing has stopped, use
 mouth to mouth resuscitation.
 INGESTION: Do not induce vomiting. Give 1 to 2 glasses of water. Get
 medical assistance. (Note to physician: Material if aspirated into
 the lungs may cause chemical pneumonitis. Treat appropriately.)

REC'D FEB 01 1994

602623-00 MOBIL DTE 24

MOBIL OIL CORPORATION MATERIAL SAFETY DATA BULLETIN

REVISED:06/22/93

***** I. PRODUCT IDENTIFICATION *****
MOBIL DTE 24

SUPPLIER: 24-HOUR EMERGENCY (CALL COLLECT):
MOBIL OIL CORP. (609) 737-4411
CHEMICAL NAMES AND SYNONYMS: CHEMTREC:
PET. HYDROCARBONS AND ADDITIVES (800) 424-9300
USE OR DESCRIPTION: PRODUCT AND MSDS INFORMATION:
HYDRAULIC OIL (800) 662-4525

***** II. TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *****

APPEARANCE: Amber Liquid ODOR: Mild PH: NA
VISCOSITY AT 40 C, CS: > 30.4
VISCOSITY AT 100 C, CS: 5.3
FLASH POINT F(C): > 395(202) (ASTM D-92)
MELTING POINT F(C): NA POUR POINT F(C): -10(-23)
BOILING POINT F(C): > 600(316) VOC: < 3.00(Wt. %); 0.219 lbs/gal
RELATIVE DENSITY, 15/4 C: 0.874 SOLUBILITY IN WATER: Negligible
VAPOR PRESSURE-mm Hg 20C: < 0.1

NA=Not Applicable NE=Not Established D=Decomposes
FOR FURTHER INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE.

***** III. POTENTIALLY HAZARDOUS INGREDIENTS *****

None

See Sections XII and XIII for regulatory and further compositional data.

***** IV. HEALTH HAZARD DATA *****

--- INCLUDES AGGRAVATED MEDICAL CONDITIONS, IF ESTABLISHED ---
THRESHOLD LIMIT VALUE: 5.00 mg/m3 Suggested for Oil Mist
EFFECTS OF OVEREXPOSURE: No significant effects expected.

***** V. EMERGENCY AND FIRST AID PROCEDURES *****

--- FOR PRIMARY ROUTES OF ENTRY ---

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.
SKIN CONTACT: Wash contact areas with soap and water. High pressure accidental injection through the skin requires immediate medical attention for possible incision, irrigation and/or debridement.
INHALATION: Not expected to be a problem.
INGESTION: Not expected to be a problem. However, if greater than 1/2 liter(pint) ingested, immediately give 1 to 2 glasses of water and call a physician, hospital emergency room or poison control center for assistance. Do not induce vomiting or give anything by mouth to an unconscious person.

REC'D FEB 01 1994

671305-00 VACMUL 3 A

MOBIL OIL CORPORATION MATERIAL SAFETY DATA BULLETIN

REVISED:06/21/93

***** I. PRODUCT IDENTIFICATION *****
VACMUL 3 A

SUPPLIER:	24-HOUR EMERGENCY (CALL COLLECT):
MOBIL OIL CORP.	(609) 737-4411
CHEMICAL NAMES AND SYNONYMS:	CHEMTREC:
PETROLEUM HYDROCARBONS	(800) 424-9300
USE OR DESCRIPTION:	PRODUCT AND MSDS INFORMATION:
METAL PROCESSING OIL	(800) 662-4525

***** II. TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *****

APPEARANCE: Light Amber Liquid	ODOR: Mild	PH: NA
VISCOSITY AT 40 C, CS: 4.2		
VISCOSITY AT 100 C, CS: NE		
FLASH POINT F(C): 260(127) (ASTM D-92)		
MELTING POINT F(C): NA	POUR POINT F(C): 30(-1)	
BOILING POINT F(C): > 450(232)	VOC: < 40.00(Wt. %); 2.905 lbs/gal	
RELATIVE DENSITY, 15/4 C: 0.871	SOLUBILITY IN WATER: Negligible	
VAPOR PRESSURE-mm Hg 20C: < 0.1		

NA=Not Applicable NE=Not Established D=Decomposes
FOR FURTHER INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE.

***** III. POTENTIALLY HAZARDOUS INGREDIENTS *****

		-- EXPOSURE LIMITS --		
		---TWA---	----STEL---	NOTE
Wt.%	Source	ppm mg/m3	ppm mg/m3	
----	-----	---	-----	----
STRAIGHT RUN MIDDLE	100%			
DISTILLATE (64741-44-2)				

Low viscosity oils have been associated with skin irritation.
(See Section IV.)

See Sections XII and XIII for regulatory and further compositional data.
NOTE: Limits shown for guidance only. Follow applicable regulations.

***** IV. HEALTH HAZARD DATA *****

--- INCLUDES AGGRAVATED MEDICAL CONDITIONS, IF ESTABLISHED ---
THRESHOLD LIMIT VALUE: 5.00 mg/m3 Suggested for Oil Mist
EFFECTS OF OVEREXPOSURE: Prolonged repeated skin contact with low
viscosity materials may defat the skin resulting in possible
irritation and dermatitis.

REC'D FEB 01 1994

600486-00 MOBIL VACTRA OIL NO. 1

MOBIL OIL CORPORATION MATERIAL SAFETY DATA BULLETIN

REVISED:06/24/93

***** I. PRODUCT IDENTIFICATION *****
MOBIL VACTRA OIL NO. 1

SUPPLIER: 24-HOUR EMERGENCY (CALL COLLECT):
MOBIL OIL CORP. (609) 737-4411
CHEMICAL NAMES AND SYNONYMS: CHEMTREC:
PET. HYDROCARBONS AND ADDITIVES (800) 424-9300
USE OR DESCRIPTION: PRODUCT AND MSDS INFORMATION:
WAY OIL (800) 662-4525

***** II. TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *****

APPEARANCE: Brown Liquid ODOR: Mild PH: NA
VISCOSITY AT 40 C, CS: > 30.0
VISCOSITY AT 100 C, CS: 5.3
FLASH POINT F(C): > 350(177) (ASTM D-92)
MELTING POINT F(C): NA POUR POINT F(C): 20(-7)
BOILING POINT F(C): > 600(316) VOC: < 4.00(Wt. %); 0.29 lbs/gal
RELATIVE DENSITY, 15/4 C: 0.871 SOLUBILITY IN WATER: Negligible
VAPOR PRESSURE-mm Hg 20C: < 0.1

NA=Not Applicable NE=Not Established D=Decomposes
FOR FURTHER INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE.

***** III. POTENTIALLY HAZARDOUS INGREDIENTS *****

None

See Sections XII and XIII for regulatory and further compositional data.

***** IV. HEALTH HAZARD DATA *****
--- INCLUDES AGGRAVATED MEDICAL CONDITIONS, IF ESTABLISHED ---
THRESHOLD LIMIT VALUE: 5.00 mg/m3 Suggested for Oil Mist
EFFECTS OF OVEREXPOSURE: No significant effects expected.

***** V. EMERGENCY AND FIRST AID PROCEDURES *****
--- FOR PRIMARY ROUTES OF ENTRY ---

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.
SKIN CONTACT: Wash contact areas with soap and water.
INHALATION: Not expected to be a problem.
INGESTION: Not expected to be a problem when ingested. If uncomfortable seek medical assistance.

REC'D FEB 01 1994



MATERIAL SAFETY DATA SHEET

MSDS NUMBER ▶

60,270-10

PAGE 1

97367 (4-85)

24 HOUR EMERGENCY ASSISTANCE		GENERAL MSDS ASSISTANCE		<div>BE SAFE READ OUR PRODUCT SAFETY INFORMATION ... AND PASS IT ON <small>(PRODUCT LIABILITY LAW REQUIRES IT)</small></div>
SHELL: 713-473-9461 CHEMTREC: 800-424-9300		SHELL: 713-241-4819		
ACUTE HEALTH * + 1	FIRE 1	HAZARD RATING ▶	REACTIVITY 0	
HAZARD RATING ▶ LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4				
*For acute and chronic health effects refer to the discussion in Section III				

SECTION I	NAME
PRODUCT ▶	SHELL TELLUS(R) OIL 68
CHEMICAL NAME ▶	MIXTURE (SEE SECTION IIA)
CHEMICAL FAMILY ▶	PETROLEUM HYDROCARBON; HYDRAULIC OIL
SHELL CODE ▶	65211

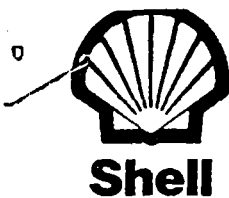
SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL TELLUS OIL 68	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-64-7	0-99
2	SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	64742-65-0	0-99
3	MINOR ADDITIVES	MIXTURE	<2

SECTION II-B		ACUTE TOXICITY DATA	
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 3 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III	HEALTH INFORMATION
THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).	
EYE CONTACT BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE EYES.	
SKIN CONTACT BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN SKIN DISORDERS SUCH AS DERMATITIS. OIL ACNE OR FOLLICULITIS. ACCIDENTAL RELEASE UNDER HIGH PRESSURE APPLICATIONS MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.	
INHALATION THE INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.	

REC'D FEB 01 1994



MATERIAL SAFETY DATA SHEET

97367 (4-85)

MSDS NUMBER ▶

60,050-10

PAGE

24 HOUR EMERGENCY ASSISTANCE		GENERAL MSDS ASSISTANCE	
SHELL: 713-473-9461 CHEMTREC: 800-424-9300		SHELL: 713-241-4819	
ACUTE HEALTH + + 1	FIRE 1	REACTIVITY 0	HAZARD RATING LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4
*For acute and chronic health effects refer to the discussion in Section III			



SECTION I	NAME
PRODUCT ▶	SHELL TELLUS(R) OIL 32
CHEMICAL NAME ▶	MIXTURE (SEE SECTION IIA)
CHEMICAL FAMILY ▶	PETROLEUM HYDROCARBON; HYDRAULIC OIL
SHELL CODE ▶	65208

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL TELLUS OIL 32	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-64-7	0-99
2	SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	64742-65-0	0-99
3	MINOR ADDITIVES	MIXTURE	<2

SECTION II-B		ACUTE TOXICITY DATA	
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 3 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT

BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE EYES.

SKIN CONTACT

BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN SKIN DISORDERS SUCH AS DERMATITIS. OIL ACNE OR FOLLICULITIS. ACCIDENTAL RELEASE UNDER HIGH PRESSURE APPLICATIONS MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION

THE INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.

REC'D FEB 01 1994



MATERIAL SAFETY DATA SHEET

MSDS NUMBER

60,530-9

PAGE

97307 (4-85)

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH +	FIRE 1	REACTIVITY 0	HAZARD RATING LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4		
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I	NAME
PRODUCT	SHELL TELLUS(R) OIL 10
CHEMICAL NAME	MIXTURE (SEE SEC. IIA)
CHEMICAL FAMILY	PETROLEUM HYDROCARBON; HYDRAULIC OIL
SHELL CODE	65203

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL TELLUS OIL 10	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED MIDDLE DISTILLATE	64742-46-7	0-100
2	SEVERELY HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	0-100
3	MINOR ADDITIVES	MIXTURES	<1

SECTION II-B		ACUTE TOXICITY DATA	
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 3 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT

BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE EYES.

SKIN CONTACT

BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN SKIN DISORDERS SUCH AS DERMATITIS, OIL ACNE OR FOLLICULITIS. ACCIDENTAL RELEASE UNDER HIGH PRESSURE APPLICATIONS MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION

THE INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.

REC'D FEB 01 1994



Cato Oil and Grease Co.

P. O. Box 26868
Oklahoma City, OK 73126



A SUBSIDIARY OF KERR-MCGEE REFINING CORPORATION

MATERIAL SAFETY DATA SHEET

MSDS NUMBER

C-5438

EMERGENCY TELEPHONE

COMPANY

405-424-3311

CHEMTREC

800-424-9300

I. PRODUCT IDENTIFICATION

PRODUCT		CHEMICAL NAME			
*Mystik ^R JT-6 ^R High Temp Grease		Complex Mixture			
CHEMICAL FAMILY		FORMULA			
Petroleum Hydrocarbon Lubricant		Complex Mixture			
NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATING CODES		HEALTH CODE	FIRE CODE	REACTIVITY CODE	
Least - 0 Moderate - 2		Slight - 1 High - 3 Extreme - 4	1	1	0

II SUMMARY OF HAZARDS

WARNING: Contains Petroleum Hydrocarbon Lubricant and Organometallic Zinc. May Cause Eye And Skin Irritation. May Be Harmful If Inhaled Or Swallowed. Use Only With Adequate Ventilation. See Section IV For Additional Health Information.

DOT Hazardous Material	Yes _____ No <u>X</u>	DOT SHIPPING NAME AND NUMBER	N/A	DOT HAZARD CLASS	N/A
------------------------	-----------------------	------------------------------	-----	------------------	-----

III. HAZARDOUS COMPONENTS

INGREDIENT	% RANGE	PEL/TLV	HAZARD
------------	---------	---------	--------

Petroleum Hydrocarbon Lubricant	>76	Oil Mist TWA 5 mg/M ³ /STEL 10 mg/M ³	Respiratory Irritant
Zinc, Organic Compound	1.0	Not Established	Eye & Skin Irritant
Soap and Proprietary Ingredients	<19	Not Established	-----
Proprietary Ingredient	3-5	Not Established	Eye Irritant

Ingredients are proprietary. Potential hazards have been evaluated and pertinent information has been included in Sections IV-VIII.

CLC Lubricants Company
100 S.Old Kirk Rd.
P.O. Box 754
Geneva, IL 60134
(708)232-7900

MATERIAL SAFETY DATA SHEET

Product Code#: 013092

Cheatrec:(800)424-9300

MSHA: HMIS: 0-1-0 1-slight, 2-moderate, 3-serious, 4-severe

Product Name: CLC LUBE HO-149-Z

Warning Statements: EYE AND SKIN IRRITANT
Do Not Ingest

Chemical Name: MIXTURE

DOT Shipping Name: N/A

SARA Title III Section 313: N/A

Ingredients:

PETROLEUM HYDROCARBON BLEND

TLV - 5 mg/M3 (OSHA TWA / ACGIH TWA)

CAS # 64742-58-1
64742-54-7
64742-57-0

EMERGENCY AND FIRST AID PROCEDURES

Eye Contact: Flush with water for 15 minutes. If irritation persists, seek medical attention.

Skin Contact: Wash with soap and water. If irritation occurs, seek medical attention.

Inhalation: Remove to fresh air. If breathing difficulties arise, seek medical attention.

Ingestion: Consult a Physician

Boiling point, F ABOVE 400 Specific Gravity(water=1) LIGHTER % Volatile NEGLECTIBLE
Solubility in Water NEGLECTIBLE Evaporation Rate(ether=1) SLOWER Vapor Density N/D
Viscosity, SUS @ 100 F Various Appearance and Odor Light yellow to amber liquids

REC'D FEB 01 1994

NFPA DESIGNATION 704

HAZARD RATING	- HEALTH	0	-
4=Extreme			
3=High	- FIRE	1	-
2=Moderate			
1=Slight	- REACTIVITY	0	-
0=Insignificant			
	- SPECIFIC HAZARD	NONE	-

MATERIAL SAFETY DATA SHEET

SECTION 1 NAME AND PRODUCT

MANUFACTURER'S NAME: SUNNEN PRODUCTS COMPANY
 ADDRESS: 7910 Manchester Ave.
 St. Louis, Mo. 63143
 United States of America

CONTACT: Chuck Korn
 EMERGENCY PHONE NO: 314-781-2105
 APPROVED BY: Terry Heller
 TITLE: Manager, Materials R/D
 DATE: December 15, 1989

TRADE NAME, COMMON NAME OR SPECIFICATION: CK448A GEAR OIL

SECTION 2 HAZARDOUS INGREDIENTS/IDENTITY (PER 29 C.F.R. 1910.1200(g))

CHEMICAL AND (COMMON)	MAX	CAS	OSHA	OSHA	ACGIH	CARCINOGENIC
NAME OF COMPONENTS	Wt%	NO.	TWA	STEL	TWA	
			Z1-A	Z1-A		
			mg/cu m			

MINERAL OIL, SEVERELY HYDROTREATED	>95	64741-44-2	5(mist)	NONE	5(mist)	N
OR SEVERELY SOLVENT REFINED						

CONTAINS NO EXTREMELY HAZARDOUS SUBSTANCES PER SARA TITLE III. COMPONENTS REGISTERED IN ACCORDANCE WITH TSCA. FOR FURTHER SAFETY AND HEALTH INFORMATION REGARDING THE COMPOSITION OF THIS MATERIAL CONTACT SUNNEN PRODUCTS.

These mixture ingredients are cited on the following lists:

Name	CAS	Citations
MINERAL OIL	64741-44-2	2,4,5,6,7,9,10,11,12,13,14,16,17
ANIMAL FATTY OIL	8016-28-2	5,6,10,21,22
ASPHALT (PETROLEUM)	8052-42-4	4,5,7,10,12,13,16,18,

1=IARC 2=OSHA 3=NTP 4=ACGIH 5=NFPA49 6=NFPA325M 7=DOT HMT 49CFR172.101 8=EPA 9=RTECS 10=MA RTK 11=AK RTK 12=CA RTK
 13=FL RTK 14=IL RTK 15=ME RTK 16=MN RTK 17=NH RTK 18=NJ RTK 19=Cincinnati, OH RTK 20=Norwood, OH RTK 21=PA RTK
 22=RI RTK 23=WV RTK

SECTION 3 PHYSICAL & CHEMICAL CHARACTERISTICS

SPECIFIC GRAVITY (WATER=1)----- .904

PERCENT VOLATILE BY WEIGHT----- <1%

BOILING POINT----- >600 F (316 C)

VAPOR PRESSURE (mm Hg)----- <.1mm Hg @ 77 F (25 C)

VAPOR DENSITY (Air=1)----- HEAVIER THAN AIR

EVAPORATION RATE----- NEGLIGIBLE

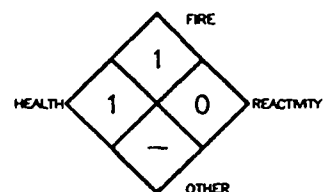
SOLUBILITY IN WATER----- NEGLIGIBLE. MATERIAL IS COMPLETELY SOLUBLE IN COMMON HYDROCARBON OR CHLORINATED
 HYDROCARBON SOLVENTS SUCH AS MINERAL SPIRITS OR TRICHLOROETHANE.

REACTIVITY IN WATER----- NO HAZARDOUS REACTIONS

APPEARANCE AND ODOR----- DARK GREEN LIQUID.

SECTION 4 SPECIAL PRECAUTIONS

HANDLING AND STORAGE: NONE Refer to Section 7



MATERIAL SAFETY DATA SHEET

SECTION 1 NAME AND PRODUCT

MANUFACTURER'S NAME AND ADDRESS:

SUNNEN PRODUCTS COMPANY
7910 Manchester Ave.
St. Louis, MO 63143
U.S.A.

CONTACT:

EMERGENCY PHONE NO:

APPROVED BY:

TITLE:

DATE:

Chuck Korn

314-781-2105

Terry Heller

Manager, Materials R&D

November 1, 1991

TRADE NAME: MB-30-5 OR MB-30-55 HONING OIL OR VGS-20657 SEAT CUTTING OIL

SECTION 2 INGREDIENTS/IDENTITY (PER 29 CFR 1910.1200(g))

CHEMICAL NAME OF COMPONENTS	CAS NO.	Wt. %	OSHA Z1A 8 HR TWA	OSHA Z1A STEL	OSHA Z1A SKIN mg/cm ²	ACGIH TWA	CARCINOGENIC
PETROLEUM DISTILLATE	64741-44-2	TRADE SECRET	5(mist)	NONE	NONE	5(mist)	N(1)
PETROLEUM DISTILLATE SEVERELY HYDROTREATED, LIGHT NAPHTHENIC	64742-53-6	TRADE SECRET	5(mist)	NONE	NONE	5(mist)	N(1,2)
PETROLEUM DISTILLATE SEVERELY HYDROTREATED, HEAVY NAPHTHENIC	64742-52-5	TRADE SECRET	5(mist)	NONE	NONE	5(mist)	N(1)
ANIMAL FATTY OIL	8016-28-2	TRADE SECRET	NONE	NONE	NONE	NONE	N
SULFURIZED FAT	61790-49-6	TRADE SECRET	NONE	NONE	NONE	NONE	N
TOLYLTRIAZOLE	29385-43-1	TRADE SECRET	NONE	NONE	NONE	NONE	N

THE EXACT COMPOSITION OF THIS MATERIAL IS BEING WITHHELD AS A TRADE SECRET OF SUNNEN PRODUCTS COMPANY. FOR FURTHER SAFETY AND HEALTH INFORMATION REGARDING THE COMPOSITION OF THIS MATERIAL CONTACT SUNNEN PRODUCTS. (1) Mineral oil used in the occupation of metal machining is known to the state of California to cause cancer. (2) Note that the CAS number refers to the material prior to additional hydrotreating. No CAS number is available to describe the material after additional severe hydrotreating. The severely hydrotreated oil is not cited by IARC.

These mixture ingredients are cited on the following lists:

Name	CAS	Citations
MINERAL OIL	64741-44-2	2,4,5,6,9,10,11,12,13,14,16,17
MINERAL OIL	64742-53-6	2,4,5,6,9,10,11,12,13,14,16,17
MINERAL OIL	64742-52-5	2,4,5,6,9,10,11,12,13,14,16,17
SULFURIZED FAT	61790-49-6	NONE
ANIMAL FATTY OIL	8016-28-2	5,6,10,21,22
TOLYLTRIAZOLE	29385-43-1	NONE

1=IARC 2=OSHA 3=NTP 4=ACGIH 5=NTPA49 6=NTPA325M 7=DOT HMT 49CFR172.101 8=EPA SARA III 9=RTECS 10=MA RTK 11=AK RTK 12=CA RTK 13=FL RTK 14=IL RTK 15=ME RTK 16=MN RTK 17=NH RTK 18=NJ RTK 19=Cincinnati, OH RTK 20=Norwood, OH RTK 21=PA RTK 22=RI RTK 23=WV RTK

SECTION 3 PHYSICAL & CHEMICAL CHARACTERISTICS

SPECIFIC GRAVITY (WATER=1)	.88
APPEARANCE AND ODOR	Dark brown mobile liquid with characteristic odor of sulfurized fat.
PERCENT VOLATILE BY WEIGHT	<1%
REACTIVITY IN WATER	No hazardous reactions.
BOILING POINT	>500 F (260 C)
VAPOR DENSITY (Air=1)	Heavier than air.
VAPOR PRESSURE (mm Hg)	<.1mm Hg @ 68 F (20 C)
EVAPORATION RATE	Negligible
SOLUBILITY IN WATER	Negligible. Material is completely soluble in common hydrocarbon or chlorinated hydrocarbon solvents such as mineral spirits or trichloroethane.

SECTION 4 SPECIAL PRECAUTIONS

HANDLING AND STORAGE: Store away from heat or flame. Read and follow container warnings. Refer to MSDS Section 7 & 8.

REC'D FEB 01 1994



REC'D FEB 14 1994

METAL LUBRICANTS CO.

METAL LUBRICANTS CO.

MELQUENCH HS 234 - BULK

PAGE 1

M A T E R I A L S A F E T Y D A T A S H E E T

METAL LUBRICANTS CO.
7050 LATHROP AVE.
HARVEY, IL 60426INFORMATION TELEPHONE NO.: 708-333-8900
EMERGENCY TELEPHONE NO.: 800-255-3924

REPARATION DATE: 01/25/91

REPLACES DATE: NEW MSDS

PREPARER: CIB

SECTION I - PRODUCT IDENTIFICATION

MELQUENCH HS 234 - BULK

4220003

SECTION II - HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS NUMBER	WT. PERCENT IS LESS THAN	OCCUPATIONAL EXPOSURE LIMITS (TLV-TWA)	(TLV-STEL)	SKIN DESIG- NATION	VAPOR PRESSURE mmHg 20C	KNOWN OR SUSPECTED CARCINOGEN	9
Minoritary additive	mixture	5 %	NO INFO	NO INFO	NO	0.0	NO	N

N.A. - NOT APPLICABLE

SECTION III - PHYSICAL DATA

BOILING RANGE	: UNKNOWN	VAPOR DENSITY	: -
ODOR	: PETROLEUM ODOR	EVAPORATION RATE	: -
APPEARANCE	: AMBER LIQUID		
VOLATILE BY WEIGHT	: < 0.1 %	SOLUBILITY	: INSOLUBLE
VOLATILE BY VOLUME	: < 0.1 %	PRODUCT DENSITY	: 0.88

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION:	FLASH POINT: 360 F (CLEVELAND OPEN CUP)	LEL: N.A. UEL: N.A.
------------------------------	--	------------------------

DOT - NOT REGULATED

EXTINGUISHING MEDIA: CARBON DIOXIDE DRY CHEMICAL ALCOHOL FOAM

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

UNUSUAL FIRE AND EXPLOSION HAZARDS: DO NOT DIRECT A SOLID STREAM OF WATER INTO BURNING PRODUCT, THIS MAY CAUSE SPREADING AND INCREASED FIRE INTENSITY. COMBUSTION MAY PRODUCE: OXIDES OF CARBON, OXIDES OF SULFUR, AND INCOMPLETELY BURNED HYDROCARBONS IN THE FORM OF FUMES AND SMOKE.

SPECIAL FIREFIGHTING PROCEDURES: WEAR A SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.



REC'D FEB 14 1994

METAL LUBRICANTS CO.

METAL LUBRICANTS CO.

MELKUT 291 - BULK

PAGE 1

M A T E R I A L S A F E T Y D A T A S H E E T

METAL LUBRICANTS CO.
7050 LATHROP AVE.
HARVEY, IL 60426INFORMATION TELEPHONE NO.: 708-333-8900
EMERGENCY TELEPHONE NO.: 800-255-3924

REPARATION DATE: 07/20/92

REPLACES DATE: 02/17/92

PREPARER: CDB

SECTION I - PRODUCT IDENTIFICATION

MELKUT 291 - BULK

3630003

SECTION II - HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS NUMBER	WT. PERCENT IS LESS THAN	OCCUPATIONAL EXPOSURE LIMITS (TLV-TWA)	SKIN DESIG- NATION	VAPOR PRESSURE mmHg 20C	KNOWN OR SUSPECTED CARCINOGEN
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THIS MATERIAL IS NOT CONSIDERED HAZARDOUS UNDER THE OSHA
HAZARD COMMUNICATION STANDARD CFR TITLE 29 1910.1200

N.A. - NOT APPLICABLE

SECTION III - PHYSICAL DATA

BOILING RANGE	: UNKNOWN	VAPOR DENSITY	: UNKNOWN
DOR	: MILD SULFUR ODOR	EVAPORATION RATE	: UNKNOWN
APPEARANCE	: DARK BROWN LIQUID		
VOLATILE BY WEIGHT	: < 0.1 %	SOLUBILITY	: INSOLUBLE
VOLATILE BY VOLUME	: < 0.1 %	PRODUCT DENSITY	: 0.90

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION:	FLASH POINT: 340 F (CLEVELAND OPEN CUP)	LEL: N.A. UEL: N.A.
------------------------------	--	------------------------

DOT - NOT REGULATED

EXTINGUISHING MEDIA: ALCOHOL CARBON DIOXIDE DRY CHEMICAL FOAM

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

UNUSUAL FIRE AND EXPLOSION HAZARDS: DO NOT DIRECT A SOLID STREAM OF WATER
INTO BURNING PRODUCT, THIS MAY CAUSE SPREADING AND INCREASED FIRE
INTENSITY. COMBUSTION MAY PRODUCE: OXIDES OF CARBON, OXIDES OF SULFUR, AND
COMPLETELY BURNED HYDROCARBONS IN THE FORM OF FUMES AND SMOKE.SPECIAL FIREFIGHTING PROCEDURES: WEAR A SELF-CONTAINED BREATHING APPARATUS
WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN
FIGHTING FIRES.



SOL

1. MATERIAL AND MANUFACTURER IDENTIFICATION

Product name TRIM® SOL
Material type Water miscible cutting and grinding fluid concentrate
Classification/synonym(s) Chemical emulsion/Soluble oil
Product use Coolant and lubricant in metal removal processes
Manufacturer address MASTER CHEMICAL CORPORATION
 501 West Boundary
 Perrysburg, OH 43551-1263
Emergency telephone 419-874-7902 **Fax** 419-874-0684

2. REGULATORY INFORMATION

Department of Transportation DOT Hazard Class: None
 TRIM® SOL is not classified as a hazardous material by DOT.
Resource Conservation and Recovery Act EPA Hazardous Waste Number(s): None
 TRIM® SOL is not classified as a hazardous waste by EPA.
Toxic Substances Control Act All TRIM® SOL ingredients are listed on the TSCA Inventory of Chemical Substances.
Superfund Amendments and Reauthorization Act of 1986 TRIM® SOL does not contain any SARA Title III Section 302/304 Extremely Hazardous Substances or Section 313 Toxic Chemicals.

3. INGREDIENT INFORMATION

COMPONENT	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	CAS #	% RANGE
petroleum oil	5 mg/m ³ (mist)	5 mg/m ³ (mist)	none	8002-05-9	30-40
petroleum sulfonate	none	none	none	61789-85-3	20-30
chlorinated alkene polymer	none	none	none	68410-99-1	20-30
nonionic surfactant	none	none	none	68991-48-0	1-10
aromatic alcohol	none	none	none	68603-15-6	1-10
propylene glycol ether	none	none	none	68603-15-6	1-10
propylene glycol	none	none	none	57-55-6	<1
substituted indole	none	none	none	63231-48-1	<1
blue-green dye	none	none	none	63231-48-1	<1
silicone defoamer	none	none	none	63148-62-9	<1
water	none	none	none	7732-18-5	balance

The exact chemical identities and percentages of the raw materials used in TRIM® SOL are trade secrets. This information is being withheld as provided for in the Occupational Safety and Health Administration's Hazard Communication Rule (29 CFR 1910.1200).

4. PHYSICAL DATA

Boiling point (at 760 mm Hg)	217°F (103°C)	Specific gravity (H ₂ O=1)	0.99
Vapor pressure (psi)	<1	Percent volatiles by volume	18.48%
Vapor density (Air=1)	Not determined	Evaporation rate (butyl acetate=1)	1
Solubility in water	100%	pH of concentrate	Not applicable
Appearance	Dark green viscous liquid with a mild, pleasant odor	pH of freshly mixed emulsion with demineralized water at 5%	9.1
		Normal pH range for working solution	7.3-8.5

5. FIRE AND EXPLOSION HAZARD DATA

Flash point (test method)	305°F (152°C) (COC) None (TCC)	Flammable limits	Not determined
Extinguishing media	As appropriate for the surrounding fire; water (flood with water), dry chemical, CO ₂ or "alcohol" foam		
Special fire fighting procedures	None	Unusual fire and explosion hazards	None

REC'D FEB 01 1994

M A T E R I A L S A F E T Y D A T A S H E E T

SECTION I

HINSDALE CHEMICALS, INC.
1450 AMHERST COURT JOLIET, IL 60433
EMERGENCY TELEPHONE NUMBER: 1 (815) 723-3451

TRADE NAME: HINSCOOL 243

CAS # Proprietary Mixture

CHEMICAL FAMILY: Synthetic Cutting and Grinding Fluid DATE PREPARED: 071091

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENTS	PERCENT	TLV
None		

SECTION III - PHYSICAL DATA

APPEARANCE & ODOR	BLUE TRANSPARENT LIQUID
SPECIFIC GRAVITY	1.05 @ 25C
BOILING POINT	212 F
SOLUBILITY IN WATER	COMPLETE

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT: NONE
EXTINGUISHING MEDIA: NOT APPLICABLE - WATER BASED SOLUTION
SPECIAL FIRE FIGHTING PROCEDURES: NONE
UNUSUAL FIRE & EXPLOSION HAZARDS: NONE

SECTION V - HEALTH HAZARD

HEALTH HAZARD: NOT DETERMINED

EMERGENCY AND FIRST AID PROCEDURES: IN CASE OF EYE CONTACT - FLUSH EYES WITH WATER AND SEEK MEDICAL ATTENTION.

SECTION VI - REACTIVITY

STABILITY: STABLE
CONDITIONS TO AVOID: NONE KNOWN
INCOMPATIBILITIES: CO2, NH3
HAZARDOUS DECOMPOSITION: None known
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VII - SPILL, LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Soak up with oil-absorbent compound. Treat as mildly alkaline detergent solution.

DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH STATE, LOCAL, AND FEDERAL REGULATIONS.

ATTN: MATERIAL SAFETY DATA SHEET

JEANETTE DANIELSON

conforms to OSHA form No. 1213-0072
complies with OSHA hazard
communication standard, 29CFR1910.1200

Page 1 of 7
REC'D FEB 23 1994
Confirmed

NEPA HAZARD RATING
HEALTH = 1
FLAMMABILITY = 2
REACTIVITY = 0

IDENTITY: Super Agitene - Cleaning compound. Combustible liquid.

SECTION I

MANUFACTURERS NAME:
Graymills Corporation

ADDRESS:
3705 N. Lincoln Avenue
Chicago, Illinois 60613

EMERGENCY #: 1-800-424-9300
TELEPHONE #: (312) 477-4100
DATE PREPARED: February 5, 1991
PREPARERS SIGNATURE: *Richard M. Weber*

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY/COMMON NAME(S))	OSHA PEL	ACGIH TLV	CAS#
Aliphatic Petroleum Distillate	300 PPM	100 PPM	64742-47-8
Dipropylene Glycol Methyl Ether	100 PPM	100 PPM	34590-94-8

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (F.):	318° - 388°	SPECIFIC GRAVITY (WATER=1)	.78
VAPOR PRESSURE (mm Hg): @25°C	10.0	MELTING POINT:	None
VAPOR DENSITY (AIR=1):	4.8	EVAPORATION RATE (N-BUTYL ACETATE=1)	<0.1

SOLUBILITY IN WATER: None

APPEARANCE & ODOR: Clear green - mild mineral spirits odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): 110°F Tag CC (ASTM D56)	FLAMMABLE LIMITS:	LEL 0.6%	UEL 7.0%
---	-------------------	-------------	-------------

EXTINGUISHING MEDIA:

CO(2) foam, dry chemicals, water spray (fog).

SPECIAL FIRE FIGHTING PROCEDURES: Cool sealed drums with water to lessen chance of rupture. Wear self-contained breathing gear. Minimize breathing of gases, vapors or decomposition products.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Combustible liquid, drums could fracture if heated. Autoignition temperature approximately 450°F (232°C).

REC'D FEB 01 1994

SA


**Material Safety
Data Sheets**
Division of Facilities Services

DOD Hazardous Material Information (ANSI Format) For Cornell University Convenience Only

6300 SAFETY-KLEEN AQUEOUS CLEANER

Section 1 - Product and Company Identification	Section 9 - Physical & Chemical Properties
Section 2 - Composition/Information on Ingredients	Section 10 - Stability & Reactivity Data
Section 3 - Hazards Identification Including Emergency Overview	Section 11 - Toxicological Information
Section 4 - First Aid Measures	Section 12 - Ecological Information
Section 5 - Fire Fighting Measures	Section 13 - Disposal Considerations
Section 6 - Accidental Release Measures	Section 14 - MSDS Transport Information
Section 7 - Handling and Storage	Section 15 - Regulatory Information
Section 8 - Exposure Controls & Personal Protection	Section 16 - Other Information

The information in this document is compiled from information maintained by the United States Department of Defense (DOD). Anyone using this information is solely responsible for the accuracy and applicability of this information to a particular use or situation.

Cornell University does not in any way warrant or imply the applicability, viability or use of this information to any person or for use in any situation.

Section 1 - Product and Company Identification 6300 SAFETY-KLEEN AQUEOUS CLEANER

Product Identification: 6300 SAFETY-KLEEN AQUEOUS CLEANER

Date of MSDS: 10/12/1994 **Technical Review Date:** 07/25/1996

FSC: 7930 **NIIN:** LIIN: 00F049274

Submitter: F BT

Status Code: C

MFN: 01

Article: N

Kit Part: N

Manufacturer's Information

Manufacturer's Name: SAFETY-KLEEN CORP

Post Office Box: N/K

Manufacturer's Address1: 1000 N RANDALL RD

Manufacturer's Address2: ELGIN, IL 60123-7857

Manufacturer's Country: US
General Information Telephone: 800-669-5840/312-694-2700
Emergency Telephone: 800-752-7869(US)/312-942-5969(CAN)
Emergency Telephone: 800-752-7869(US)/312-942-5969(CAN)
MSDS Preparer's Name: N/P
Proprietary: N
Reviewed: Y
Published: Y
CAGE: 30530
Special Project Code: N

Preparer Information

Preparer's Name: SAFETY-KLEEN CORP
Preparer's Address1: 1301 GERVAIS ST, SUITE 300
Preparer's Address2: COLUMBIA, SC 29201
Preparer's CAGE: 30530
Assigned Individual: N

Contractor Information

Contractor's Name: SAFETY-KLEEN CORP
Contractor's Address1: 1301 GERVAIS ST, SUITE 300
Contractor's Address2: COLUMBIA, SC 29201
Contractor's Telephone: 1-803-933-4200
Contractor's CAGE: 30530

Section 2 - Composition/Information on Ingredients **6300 SAFETY-KLEEN AQUEOUS CLEANER**

Ingredient Name: ALCOHOLS, C12-14-SECONDARY, ETHOXYLATED
Ingredient CAS Number: 84133-50-6 **Ingredient CAS Code:** M
RTECS Number: RTECS Code: X
=WT: =WT Code:
=Volume: =Volume Code:
>WT: >WT Code:
>Volume: >Volume Code:
<WT: <WT Code:
<Volume: <Volume Code:
% Low WT: % Low WT Code:
% High WT: % High WT Code:
% Low Volume: % Low Volume Code:
% High Volume: % High Volume Code:
% Text: 2
% Environmental Weight:
Other REC Limits: N/K
OSHA PEL: N/K OSHA PEL Code: M
OSHA STEL: OSHA STEL Code:
ACGIH TLV: N/K ACGIH TLV Code: M
ACGIH STEL: N/P ACGIH STEL Code:
EPA Reporting Quantity:
DOT Reporting Quantity:
Ozone Depleting Chemical:

Ingredient Name: VOLATILE ORGANIC CONTENT: 30 G/L

Ingredient CAS Number: **Ingredient CAS Code:** X

RTECS Number: 9999999VO **RTECS Code:** M

=WT: =WT Code:

=Volume: =Volume Code:

>WT: >WT Code:

>Volume: >Volume Code:

<WT: <WT Code:

<Volume: <Volume Code:

% Low WT: % Low WT Code:

% High WT: % High WT Code:

% Low Volume: % Low Volume Code:

% High Volume: % High Volume Code:

% Text: N/K

% Environmental Weight:

Other REC Limits: N/K

OSHA PEL: N/K OSHA PEL Code: M

OSHA STEL: OSHA STEL Code:

ACGIH TLV: N/K ACGIH TLV Code: M

ACGIH STEL: N/P ACGIH STEL Code:

EPA Reporting Quantity:

DOT Reporting Quantity:

Ozone Depleting Chemical:

Section 3 - Hazards Identification, Including Emergency Overview

6300 SAFETY-KLEEN AQUEOUS CLEANER

Health Hazards Acute & Chronic: EYES: LIQUID MAY CAUSE POSSIBLE INJURY, CONJUNCTIVITIS. SKIN: IRRITATION, DERMATITIS. INHALATION: RESPIRATORY TRACT IRRITATION. INGESTION: HARMFUL. MOUTH & THROAT IRRITATION, CNS DEPRESSION. BREATHING INTO THE LUNGS DURING INGESTION/VOMITING MAY CAUSE LUNG INJURY & POSSIBLY DEATH.

Signs & Symptoms of Overexposure:

STINGING, TEARING, ITCHING, SWELLING, REDNESS, IRRITATION, NAUSEA, ABDOMINAL DISCOMFORT, DIARRHEA, VOMITING, DRYING, CRACKING

Medical Conditions Aggravated by Exposure:

INDIVIDUALS W/PRE-EXISTING SKIN DISORDERS MAY HAVE INCREASED SUSCEPTIBILITY TO THE EFFECTS OF EXPOSURE.

LD50 LC50 Mixture: N/P

Route of Entry Indicators:

Inhalation: YES

Skin: NO

Ingestion: YES

Carcinogenicity Indicators

NTP: NO

IARC: NO

OSHA: NO

Carcinogenicity Explanation: NONE

Section 4 - First Aid Measures
6300 SAFETY-KLEEN AQUEOUS CLEANER

First Aid:

EYES: FLUSH W/WATER FOR 15 MINS. MOVE AWAY FROM EXPOSURE INTO FRESH AIR. SKIN: WASH TWICE W/SOAP & WATER. INHALATION: REMOVE TO FRESH AIR. USE OXYGEN IF DIFFICULTY BREATHING/CPR IF BREATHING HAS STOPPED. DON'T LEAVE VICTIM UNATTENDED. INGESTION: DRINK 2 GLASSES OF WATER. DON'T INDUCE VOMITING. IF SPONTANEOUS VOMITING OCCURS, KEEP HEAD BELOW HIPS TO AVOID ASPIRATION INTO LUNGS. (SEE SUPP)

Section 5 - Fire Fighting Measures
6300 SAFETY-KLEEN AQUEOUS CLEANER

Fire Fighting Procedures:

THIS IS AN AQUEOUS SOLUTION & ISN'T EXPECTED TO SUSTAIN COMBUSTION. NOT SENSITIVE TO MECHANICAL IMPACT/STATIC DISCHARGE.

Unusual Fire or Explosion Hazard:

N/R

Extinguishing Media:

WATER, ALCOHOL-RESISTANT FOAM

Flash Point: Flash Point Text: N/R

Autoignition Temperature:

Autoignition Temperature Text: N/A

Lower Limit(s): N/R

Upper Limit(s): N/R

Section 6 - Accidental Release Measures
6300 SAFETY-KLEEN AQUEOUS CLEANER

Spill Release Procedures:

STOP LEAK W/O RISK. WEAR PROTECTIVE EQUIPMENT. CONTAIN AWAY FROM SURFACE WATERS & SEWERS. SORB W/COMPATIBLE SORBENT & SHOVEL INTO CLOSABLE CONTAINER FOR DISPOSAL.

Section 7 - Handling and Storage
6300 SAFETY-KLEEN AQUEOUS CLEANER

Handling and Storage Precautions:**Other Precautions:**

Section 8 - Exposure Controls & Personal Protection
6300 SAFETY-KLEEN AQUEOUS CLEANER

Respiratory Protection:

NONE REQUIRED W/NORMAL USE.

Ventilation:

NO SPECIFIC CONTROLS NEEDED.

Protective Gloves:

POLY VINYL CHLORIDE

Eye Protection: CHEMICAL GOGGLES

Other Protective Equipment: CLEAN WATER SHOULD BE AVAILABLE IN WORK AREAS TO FLUSH THE

EYES/SKIN. WEAR APPROPRIATE PROTECTIVE CLOTHING.

Work Hygienic Practices: REMOVE/LAUNDER CONTAMINATED CLOTHING/SHOES BEFORE REUSE.

WASH SKIN TWICE W/SOAP & WATER.

Supplemental Health & Safety Information: USE GOOD PERSONAL HYGIENE. WASH THOROUGHLY W/SOAP & WATER AFTER HANDLING & BEFORE EATING, DRINKING/USING TOBACCO PRODUCTS.

FIRST AID CONT'D: NO SPECIFIC ANTIDOTE AVAILABLE. ADMINISTER GASTRIC LAVAGE, IF WARRANTED, SHOULD BE PERFORMED BY QUALIFIED PERSONNEL. OBTAIN MEDICAL ATTENTION IN ALL CASES.

Section 9 - Physical & Chemical Properties
6300 SAFETY-KLEEN AQUEOUS CLEANER

HCC:

NRC/State License Number:

Net Property Weight for Ammo:

Boiling Point: Boiling Point Text: 212F

Melting/Freezing Point: Melting/Freezing Text: 32F

Decomposition Point: Decomposition Text: N/K

Vapor Pressure: 17.5 **Vapor Density:** 0.6

Percent Volatile Organic Content:

Specific Gravity: 1

Volatile Organic Content Pounds per Gallon:

pH: >7

Volatile Organic Content Grams per Liter:

Viscosity: N/P

Evaporation Weight and Reference: (BU AC=1): <1

Solubility in Water: COMPLETE

Appearance and Odor: CLEAR, COLORLESS/BLUE LIQUID W/NO ODOR

Percent Volatiles by Volume: N/K

Corrosion Rate: N/K

Section 10 - Stability & Reactivity Data
6300 SAFETY-KLEEN AQUEOUS CLEANER

Stability Indicator: YES

Materials to Avoid:

N/K

Stability Condition to Avoid:

N/K

Hazardous Decomposition Products:

NONE

Hazardous Polymerization Indicator: NO

Conditions to Avoid Polymerization:

N/K

Section 11 - Toxicological Information
6300 SAFETY-KLEEN AQUEOUS CLEANER

Toxicological Information:

N/P

Section 12 - Ecological Information
6300 SAFETY-KLEEN AQUEOUS CLEANER

Ecological Information:

N/P

Section 13 - Disposal Considerations
6300 SAFETY-KLEEN AQUEOUS CLEANER

Waste Disposal Methods:

CONTACT SAFETY-KLEEN REGARDING RECYCLING/PROPER DISPOSAL. DISPOSE OF IAW/LOCAL, STATE & FEDERAL REGULATIONS.

Section 14 - MSDS Transport Information
6300 SAFETY-KLEEN AQUEOUS CLEANER

Transport Information:

N/P

Section 15 - Regulatory Information
6300 SAFETY-KLEEN AQUEOUS CLEANER

SARA Title III Information:

N/P

Federal Regulatory Information:

N/P

State Regulatory Information:

N/P

Section 16 - Other Information
6300 SAFETY-KLEEN AQUEOUS CLEANER

Other Information:

N/P

HAZCOM Label Information

Product Identification: 6300 SAFETY-KLEEN AQUEOUS CLEANER**CAGE:** 30530**Assigned Individual:** N**Company Name:** SAFETY-KLEEN CORP**Company PO Box:****Company Street Address1:** 1301 GERVAIS ST, SUITE 300**Company Street Address2:** COLUMBIA, SC 29201 US**Health Emergency Telephone:** 800-752-7869(US)/312-942-5969(CAN)**Label Required Indicator:** Y**Date Label Reviewed:** 12/16/1998**Status Code:** C**Manufacturer's Label Number:****Date of Label:** 12/16/1998**Year Procured:** N/K**Organization Code:** G**Chronic Hazard Indicator:** N/P**Eye Protection Indicator:** N/P**Skin Protection Indicator:** N/P**Respiratory Protection Indicator:** N/P**Signal Word:** N/P**Health Hazard:****Contact Hazard:****Fire Hazard:****Reactivity Hazard:**

8/8/2002 4:56:21 PM

REC'D FEB 23 1994

Date Issued: 11/25/85
Date Revised: November 1

SECTION 1 - IDENTITY

TRADE NAME: ACETAL SHAPES
CHEMICAL FAMILY: POLYOXYMETHYLENE
PRODUCT NAME: ACETAL
PART NUMBER: ACE

SECTION 2 - HAZARDOUS INGREDIENTS

Ingredient Number	Percent by wt.	Common Name	Chemical Name
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NO HAZARDOUS INGREDIENTS

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

MELTING POINT, DEGREES F: >325
SPECIFIC GRAVITY: >1.4
PERCENT VOLATILES BY VOLUME: <1.0
SOLUBILITY IN WATER: Insoluble
APPEARANCE AND ODOR: Translucent white to black solid, no odor.

SECTION 4 - PHYSICAL HAZARDS

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical or water

SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH listed, positive pressure, self-contained breathing apparatus. Avoid breathing fumes. Remove product from fire area, if possible, to avoid degradation.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Products of combustion may be toxic.

INCOMPATIBILITY (Materials to avoid): Strong acids, bases and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Formaldehyde and oxides of carbon

SECTION 5 - HEALTH HAZARDS

N/A



REV FEB 23 1994

GE Plastics-Structured Product

MATERIAL SAFETY DATA SHEET

PRODUCT 9034

01/01/94 PAGE 01/04

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

** THIS MSDS IS APPLICABLE FOR ALL COLORS AND PID NUMBERS OF THIS PRODUCT **

MANUFACTURER / SUPPLIER

General Electric Company
One Plastics Avenue
Pittsfield, MA 01201

GE Plastics Canada, Ltd.
2300 Meadowvale Blvd.
Mississauga, ONT L5N 5P9

EMERGENCY TELEPHONE

(800) 447-4545 (24 hour)
(812) 831-7444 (24 hour)

Medical
Other

(800) 447-4545 (24 hour)
(812) 831-7444 (24 hour)

NON-EMERGENCY TELEPHONE

(800) 451-3147 or (800) 323-3783

PRODUCT IDENTIFIER:

LEXAN sheet or film.

PRODUCT DESCRIPTION:

Poly(bisphenol-A carbonate) (CAS#111211-39-3).

PRODUCT USE:

May be used as received, processed to produce other articles, or as a component of other industrial products.

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product consists primarily of high molecular weight polymers which are not expected to be hazardous.

This product is not subject to the OSHA Hazard Communication Standard (29CFR1910.1200). Information on this form is being provided as a service to our customers.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Plastic film or sheet. Can burn in a fire creating dense, toxic smoke. Molten plastic can cause severe burns. Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Secondary operations, such as grinding, sanding or sawing can produce dust which may present an explosion hazard.

POTENTIAL HEALTH EFFECTS

EYE:

Dust and small particles may cause irritation due to mechanical action.

SKIN:

Dust and small particles may cause irritation due to mechanical action.

INGESTION:

Not acutely toxic.

INHALATION:

Inhalation of product is unlikely due to physical form.

CHRONIC/CARCINOGENICITY

NTP:

Not Tested

OSHA:

Not Regulated

IARC:

Not Listed

THERMAL PROCESSING HAZARDS:

Hot or molten plastic can cause severe burns.

Processing fumes may cause irritation to the eyes, skin and respiratory tract, and in cases of severe over-exposure, nausea and headache.

Grease-like processing fume condensates on ventilation duct work, molds and other surfaces can cause irritation and injury to skin.

MEDICAL RESTRICTIONS:

There are no known human health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing fumes.

NOTE:

Additives containing certain heavy metal



Rohm and Haas Company
Independence Mall West
Philadelphia, PA 19105

HEALTH EMERGENCY : 215-592-3000
SPILL EMERGENCY : 215-592-3000
OTHER : 800-424-9300
CHEMTREC : 800-424-9300

MATERIAL SAFETY DATA SHEET

REC'D FEB 23 1994

PRODUCT IDENTIFICATION

PLEXIGLAS® MC Acrylic Sheet

Product code : -ALL-
Key : 898339-9
MSDS date : 09/06/90
Supersedes : 02/10/86

Rohm and Haas Hazard Rating		Scale
Toxicity	1	4=EXTREME
Fire	1	3=HIGH
Reactivity	0	2=MODERATE
Special	-	1=SLIGHT
		0=INSIGNIFICANT

COMPONENT INFORMATION

No.	CAS REG NO.	AMT.(%)
1 P(EA/MMA)	9010-88-2	99.5, MINIMUM
2 Methyl methacrylate	80-62-6	0.5, MAXIMUM

EMERGENCY RESPONSE INFORMATION

FIRST AID PROCEDURES

Inhalation

Move subject to fresh air.

Eye Contact

Flush eyes with a large amount of water for at least 15 minutes.

FIRE FIGHTING INFORMATION

Unusual Hazards

Material as sold is combustible; burns vigorously with intense heat.

Extinguishing Agents

Use extinguishing media appropriate for surrounding fire.

Personal Protective Equipment

As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

POLYMER PRODUCTS DEPARTMENT

MATERIAL SAFETY DATA SHEET

IDENTIFICATION

INFORMATION TEL. NO. 800-441-3637

PRODUCT NAME

Delrin® acetal resin
500T NC-10, 500T BK-602,
100ST NC-10, 100ST BK-602

CHEMICAL NAME

Elastomer modified polyoxymethylene.
Elastomer modified formaldehyde
homopolymer
Polyacetal
 $[\text{CH}_2\text{O}]_n$

CAS REGISTRY NO. 9002-81-7 (resin component)

DEPARTMENT OF TRANSPORTATION

HAZARD CLASS Not Regulated

SHIPPING NAME N/A

HAZARDOUS COMPONENTS

MATERIAL	CAS	%	OSHA PEL	TLV (TWA)	DU PONT AEL
Additives not hazardous by 29 CFR 1910.1200	N/A	N/A	N/A	N/A	N/A

IS ANY CHEMICAL PRESENT IN THIS PRODUCT AT A CONCENTRATION OF 0.1% OR MORE CLASSIFIED
AS A CARCINOGEN BY IARC, NTP OR OSHA? YES/NO No

PHYSICAL DATA

MELTING POINT 172-184°C	SOLUBILITY IN WATER Insoluble	% VOLATILE N/A
FORM Solid	APPEARANCE Granules or Powder	COLOR Black or white
		ODOR slight Formaldehyde

FIRE AND EXPLOSION DATA

FLASH POINT N/A	FLASH IGNITION TEMP. 322°C	METHOD ASTM 1929-62
-----------------	----------------------------	---------------------

FIRE AND EXPLOSION HAZARDS Burns with a colorless flame. Delrin® dust cloud
ignition temperature 440°C.

EXTINGUISHING MEDIA Water, Carbon Dioxide, Foam, Dry Chemicals

SPECIAL FIRE FIGHTING INSTRUCTIONS Use self contained breathing apparatus and full
protective clothing to protect from toxic and irritating vapors.

HAZARDOUS REACTIVITY

CONDITIONS TO AVOID Heating above 220°C - forms formaldehyde

MATERIALS TO AVOID Strong acids and bases (decomposes forming formaldehyde).
Strong oxidizing agents.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS Formaldehyde is classified
as an animal carcinogen by NTP. Butanediol, traces of CO, methylene
dianiline (TLV 0.1 ppm)

PERSON RESPONSIBLE— J. B. Armitage

DATE REVISED September, 1985

NOTICE FROM DU PONT

The data in this MATERIAL SAFETY DATA SHEET relates only to the specific material designated herein and does not relate to use in
combination with any other material or in any process

1010C Fullerton Avenue
Addison, Illinois 60101
708.543.1750
FAX 708.543.4611

1010C Fullerton Avenue
Addison, Illinois 60101
708.543.1750
FAX 708.543.4611

MATERIAL SAFETY DATA SHEET 12
"CHEMFLUOR" TFE STOCK SHAPES
(ROD, SHEET, TAPES, TUBING)
PRODUCT

150 DEY ROAD, WAYNE, NEW JERSEY - 07470

SECTION I

Manufacturer's Name: CHEMPLAST, INC.		Emergency Telephone No. (201) 898-4700
Address: 150 DEY ROAD, WAYNE, N.J. 07470		
Chemical Name and Synonyms Polytetrafluoroethylene resin (TFE)		Trade Name and Synonyms Chemfluor, Teflon, Halon, Fluon
Chemical Family Perfluorocarbon resin	Formula (CF ₂ - CF ₂) _n	

SECTION II - Hazardous Mixtures Does not apply

	%	TLV (Units)

SECTION III - Physical Data

Boiling Point (°F.)	N.A.	Specific Gravity (H ₂ O = 1)	2.2
Vapor Pressure (mm Hg.)	N.A.	Percent Volatile By Volume (%)	N.A.
Vapor Density (Air = 1)	N.A.	Evaporation Rate (= 1)	N.A.
Solubility in Water	Insoluble		
Appearance and Odor	White solid, no odor		

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	N.A.	Flammable Limits	N.A.	Let	Uet
Extinguishing Media					
Special Fire Fighting Procedures					
Unusual Fire and Explosion Hazards	Will burn only when ignited in 100% oxygen, and then emits toxic gases				

SECTION V - Health Hazard Data Does not apply

Threshold Limit Value
Effects of Overexposure
Emergency and First Aid Procedures

Supplier List

Suppliers

Aqueous Cleaning Solution (1999 to present)	Safety-Kleen Corporation Elgin, IL	847-468-6530
EDM Oil (1970 to present)	Belmont Equipment Madison Heights, MI	248-588-7011
Hydraulic and Lubricating Oils (1970 to present)	Midtown Petroleum Bridgeview, IL	708-599-8700
Machining Coolant (1970 to present)	J&L Industrial Supply Livonia, MI	800-521-9520
Metals (1970 to present)	Ryerson Chicago, IL	773-762-4000
Mineral Spirits Solvent (1970 to 1999)	Graymills Chicago, IL	773-248-6825
Vibratory Deburring Compound (1970 to present)	Aamor Broadview, IL	708-343-5543

NOTE: The approximate time period for which the supplier provided the material is indicated in parentheses under the material name.

Chain of Title Search Results

Advanced Searches

Environmental Information Specialists



PROPERTY HISTORY: 1940 - Present

Chain of Title

(Deeds, Environmental Disclosures, Environmental Liens, Leases/Subleases, Conveyances)

File Number: 11149731

Property Address: 2538 Wisconsin Avenue, Downers Grove, Illinois

Permanent Index Number: 08 12 302 010

Search Date: December 30, 2002

BRIEF LEGAL DESCRIPTION

LOT 2 IN ELLSWORTH PARK, THE AMES RESUBDIVISION IN THE SOUTH ½ OF SECTION 12, TOWNSHIP 38 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN DUPAGE COUNTY, ILLINOIS.

DOCUMENT	GRANTOR	GRANTEE	INSTRUMENT	DATE RECORDED
880595	Rudolph Ellsworth	Commonwealth Edison Company & Illinois Bell Telephone Company	E	5/21/58
62-20004	Rudolph Ellsworth	Ellsworth Park Development Corporation	D	1/22/62
70-25260	Ellsworth Park Development Corporation	Norwood Marking & Equipment Company	WD	7/24/70
77-11100	Norwood Marking & Equipment Company	Marquerite Sinderson	WD	2/16/77
77-11101	Marquerite Sinderson	Downers Grove National Bank Tr 77-11	DinT	2/16/77
83-28176	Downers Grove National Bank Tr 77-11	Westglen Holding Company	D	5/12/83

This search meets or exceeds the standards set forth by ASTM.

This search was completed for all subject property from 1940-present. It can be assumed that either the first grantor listed above owned the property previous to the search period, purchased the property under a different name, or that a prior deed was mis-posted. If the property was purchased under a different name, due to the nature of the tracking system in the Recorder of Deeds Office it would be impossible to complete this search without prior knowledge of that name.

This search is of the land described herein by legal description, property index number or a street address furnished by the applicant. Advanced Searches assumes no liability for the accuracy of the legal description, property index number or street address so furnished.

Furthermore, this search is not a title insurance policy, guarantee, or opinion of title and should not be used as such. This search is of all said recorded documents in the recorder of deeds office in the county of the described property. While Advanced Searches takes utmost care in recording accurate data, it assumes no liability in the accuracy of public recorded property data.

**D=deed DinT=deed in trust E=easement ED=environmental disclosure ExD=executor's deed
INV=probate inventory L=lease QC=quit claim ShD=sheriff's deed TsD=trustee's deed WD=warranty deed**

Prepared By
Advanced Searches • 6026 S. Lake Shore Drive • Cary, Illinois 60013
Phone: 847.921.1022 • Fax: 847.639.6077

Environmental Permits

Please refer to the Instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).	<h2 style="margin: 0;">Notification of Regulated Waste Activity</h2> <p>United States Environmental Protection Agency</p>	Date Received (For Official Use Only)
I. Installation's EPA ID Number (Mark 'X' in the appropriate box)		
<input checked="" type="checkbox"/> A. First Notification	<input type="checkbox"/> B. Subsequent Notification (complete item C)	C. Installation's EPA ID Number <div style="border: 1px solid black; padding: 2px; display: inline-block;"> I L D 9 8 4 8 4 8 5 6 4 </div>
II. Name of Installation (Include company and specific site name)		
N O R W O O D M A R K I N G S Y S T E M S		
III. Location of Installation (Physical address not P.O. Box or Route Number)		
Street 2 5 3 8 W I S C O N S I N A V E		
Street (continued)		
City or Town State ZIP Code D O W N E R S G R O V E I L 6 0 5 1 5 -		
County Code County Name D U P A G E		
IV. Installation Mailing Address (See Instructions)		
Street or P.O. Box P O B O X 3 5 8		
City or Town State ZIP Code D O W N E R S G R O V E I L 6 0 5 1 5 -		
V. Installation Contact (Person to be contacted regarding waste activities at site)		
Name (last) (first) G R Z E C A P A U L		
Job Title Phone Number (area code and number) S U P E R V I S O R 7 0 8 - 9 6 8 - 0 6 4 6		
VI. Installation Contact Address (See Instructions)		
A. Contact Address Location B. Street or P.O. Box <input checked="" type="checkbox"/> 2 5 3 8 W I S C O N S I N A V E		
City or Town State ZIP Code D O W N E R S G R O V E I L 6 0 5 1 5 -		
VII. Ownership (See Instructions)		
A. Name of Installation's Legal Owner I L L I N O I S T O O L W O R K S		
Street, P.O. Box, or Route Number 3 6 0 0 L A K E A V E		
City or Town State ZIP Code G L E N V I E W I L 6 0 0 2 5 -		
Phone Number (area code and number) B. Land Type C. Owner Type D. Change of Owner Indicator E. Date Changed (Month/Day/Year) 7 0 8 - 7 2 4 - 7 5 0 0 P P X		

EPA Form 8700-12 ID - For Official Use Only

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to Instructions.)

A. Hazardous Waste Activity		B. Used Oil Fuel Activities	
<input type="checkbox"/> 1. Generator (See Instructions) <input checked="" type="checkbox"/> a. Greater than 1000 kg/mo (2,200 lbs.) <input checked="" type="checkbox"/> b. 100 to 1000 kg/mo (220 - 2,200 lbs.) <input type="checkbox"/> c. Less than 100 kg/mo (220 lbs.)	<input type="checkbox"/> 3. Treater, Storer, Disposer (at Installation) Note: A permit is required for this activity; see instructions. <input type="checkbox"/> a. Generator Marketing to Burner <input type="checkbox"/> b. Other Marketers <input type="checkbox"/> c. Burner - indicate device(s)	<input type="checkbox"/> 1. Off-Specification Used Oil Fuel <input type="checkbox"/> a. Generator Marketing to Burner <input type="checkbox"/> b. Other Marketer <input type="checkbox"/> c. Burner - indicate device(s)	<input type="checkbox"/> 2. Type of Combustion Device <input type="checkbox"/> 1. Utility Boiler <input type="checkbox"/> 2. Industrial Boiler <input type="checkbox"/> 3. Industrial Furnace
<input type="checkbox"/> 2. Transporter (Indicate Mode in boxes 1-5 below) <input type="checkbox"/> a. For own waste only <input type="checkbox"/> b. For commercial purposes Mode of Transportation: <input type="checkbox"/> 1. Air <input type="checkbox"/> 2. Rail <input type="checkbox"/> 3. Highway <input type="checkbox"/> 4. Water <input type="checkbox"/> 5. Other - specify _____	<input type="checkbox"/> 4. Type of Combustion Device <input type="checkbox"/> 1. Utility Boiler <input type="checkbox"/> 2. Industrial Boiler <input type="checkbox"/> 3. Industrial Furnace <input type="checkbox"/> 5. Underground Injection Control	<input type="checkbox"/> 2. Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification	

IX. Description of Regulated Wastes (Use additional sheets if necessary)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. (See 40 CFR Parts 261.20 - 261.24)

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. EP Toxic (D000)	(List specific EPA hazardous waste number(s) for the EP Toxic contaminant(s))
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

B. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33. See instructions if you need to list more than 12 waste codes.)

1	2	3	4	5	6

C. Other Wastes. (State or other wastes requiring an I.D. number. See instructions.)

1	2	3	4	5	6

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature <i>Larry J. Kollins</i>	Name and Official Title (type or print) Larry J. Kollins - Plant MGR.	Date Signed 12-16-91
--------------------------------------	--	-------------------------

XI. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (See Section III of the booklet for addresses.)



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

P. O. Box 19506, Springfield, IL 62794-9506

PERMIT WITHDRAWAL

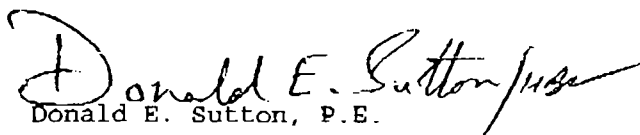
October 2, 1998

Norwood Marketing Systems
Attn: Robert Hitchcock
2538 Wisconsin Ave.
Downers Grove, IL 60515

<u>Application No.:</u>	87110042
<u>ID. No.:</u>	043030ADI
<u>Applicant's Designation:</u>	
<u>Received:</u>	July 6, 1998
<u>Operation of:</u>	Metal Engraving Facility
<u>Location:</u>	2538 Wisconsin Ave., Downers Grove, IL

A review of the permit application referenced above for Metal Engraving indicates that this project does not require a permit pursuant to 35 Ill. Adm. Code 201.146(aa)(3). This determination is based upon the information submitted. The Agency hereby acknowledges the receipt of your letter and confirms the withdrawal of your operating permit in accordance with your request.

If you have any questions or need any assistance regarding this matter, please contact Jim Cobb at 217/782-2113.

A handwritten signature in cursive script that reads "Donald E. Sutton".

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JDC/82752jdc.doc

cc: Region 1



217/782-2113

OPERATING PERMIT

PERMITTEE

FEB 19 1988

Norwood Marking Systems
Attention: Larry J. Kollins
2538 Wisconsin Avenue
Downers Grove, Illinois 60515

Application No.: 87110042

I.D. No.: 043030ADI

Applicant's Designation:

Date Received: November 13, 1987

Subject: Dust Collector

Date Issued: February 16, 1988

Expiration Date: January 31, 1993

Location: 2538 Wisconsin Avenue, Downers Grove

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of Metal Engraving with Fabric Filter as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon a minimal hourly emission rate and negligible annual emissions (less than 0.1 ton/year) of particulate matter from metal engraving.

Terry A. Sweitzer, P.E.
Manager, Permit Section
Division of Air Pollution Control

TAS:JDC:ds:4636H/7

cc: Region 1



MOSTARDI-PLATT ASSOCIATES, INC.

Environmental Consultants

February 15, 1996

Mr. Larry Kollins
Facility Supervisor
Norwood Marking Systems, Inc.
2538 Wisconsin Avenue
Downers Grove, Illinois 60515

Dear Mr. Kollins:

Enclosed is the Smaller Source Operating Permit for the Norwood Marking Systems, Inc. facility located at 2538 Wisconsin Avenue in Downers Grove, Illinois (the Norwood facility). Due to the low level of regulated air emissions at the Norwood facility, the Illinois Environmental Protection Agency (IEPA) has issued this operating permit.

This operating permit is effective for life, unless a change in Norwood facility operations alters emission levels and/or additional regulated equipment is constructed/operated. Sign the Smaller Source Operating Permit in the area indicated, and submit the signed original the following address:

IEPA
Division of Air Pollution Control
Permit Section
P.O. Box 19276
Springfield, Illinois 62794-9276.

Additionally, be sure to maintain a signed copy of this permit and the required permitted source records on file at the Norwood facility to assist in the demonstration of compliance with applicable regulatory and permit requirements. If you have any questions, please feel free to contact me at (708) 993-2123.

Sincerely,

MOSTARDI-PLATT ASSOCIATES, INC.

Britt E. Wenzel
Senior Project Manager



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-5811

January 29, 1996

RE: I.D. 197040AAN

Submittal of Annual Emissions Report for Calendar Year 1994

Crispin Abacan
Norwood Marking & Equipment Company Inc
2538 Wisconsin Ave
Downers Grove, IL 60515-4230

The Annual Emissions Report (AER) form for **calendar year 1994** was required to be submitted by May 1, 1995. As of this date, our records indicate that your company has not yet submitted this report.

Instructions and forms for completing this report were sent to your company approximately one year ago. Please submit your **Annual Emissions Report for calendar year 1994** to the Agency by **February 29, 1996**, to the following address:

David J. Kolaz, Manager
Compliance and Systems Management Section
Bureau of Air
Illinois EPA
P.O. Box 19276
Springfield, Illinois 62794-9276

If you believe that our records on this matter are in error or if you need additional instruction booklets or forms for completing the report for **calendar year 1994**, please contact Lynda Bennett of my staff at 217/782-5811. If you need technical assistance in completing the AER form, please contact Ron Miller of my staff at 217/782-5811.

Please note that the instructions and forms for calendar year 1995 were recently mailed, and you may have already received them. The 1995 report is required to be submitted by May 1, 1996. **The report that is the topic of this letter is for calendar year 1994 and is past due.**

Sincerely,

David J. Kolaz, Manager
Compliance and Systems Management Section
Bureau of Air



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

P. O. Box 19506, Springfield, IL 62794-9506

January 16, 1996

Dear Sir or Madam,

This letter is to inform you of an opportunity to quickly simplify your air permitting requirements. This opportunity is available because the Agency sought and obtained authority from the General Assembly to issue lifetime permits to certain smaller sources. Such a permit would eliminate the requirement to periodically renew a permit. Renewal would only be required thereafter if requested in writing by the Agency for certain specified reasons.

We urge you to see if you can take advantage of this regulatory reform. If the information provided in your annual emission report indicates that your facility has total allowable emissions of less than 25 tons/year for all regulated pollutants combined, and less than 10 tons/year for any individual hazardous air pollutant, see the column labeled allowable emissions on page two of the annual emission report, your facility qualifies to be part of the smaller source operating permit program.

If you qualify, simply sign the enclosed permit that has already been signed by the Agency and is included in this packet. For this permit to be active, it needs to be signed by the Permittee, with one copy retained for your records, and the original submitted to the Agency along with your annual emission report.

If you have any questions concerning this letter, please contact a Permit Analyst at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:bsk



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT FOR SMALLER SOURCE

PERMITTEE

NORWOOD MARKING SYSTEMS
Attention:
2538 WISCONSIN AVENUE
DOWNERS GROVE, IL 60515

I.D. No.: 043030ADI

Permit No.: 87110042

Included Permit(s): 87110042

Date Issued: May 1, 1996 Expiration Date: See Condition 1.

Subject: Smaller source operating permit

Location: 2538 WISCONSIN AVENUE, DOWNERS GROVE

This permit is hereby granted to the above-designated Permittee and shall become effective on the date issued above, upon receipt by the Agency of the certified original permit, to OPERATE emission source(s) and/or air pollution control equipment consisting of the equipment listed in the above referenced permit(s). This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This Permit shall expire 180 days after the Agency sends a written request for the renewal of this Permit, unless the Permit is withdrawn or superseded by a revised Permit.
2. This permit is issued based on the total maximum permitted emissions of regulated pollutants not exceeding an aggregate of 25 tons/year and the maximum emissions of any single hazardous air pollutant (HAP) not exceeding 10 tons/year.
3. This permit incorporates the above listed permits by reference and the conditions contained therein. When this permit becomes effective, it removes your obligation to renew these permit(s), except when required pursuant to Condition 1.
4. The Agency's issuance of this permit does not relieve the Permittee from complying with all applicable regulations including the need to obtain any construction permits prior to the construction of any new emission units and/or air pollution control equipment, and the need to revise this operating permit to include the operation of any equipment that is required to be permitted, that is not currently covered by this permit.

This permit is effective May 1, 1996, provided the Agency receives the original copy signed by the Permittee certifying as specified below:

I certify that the original application(s) information remains true, correct, and current, that the conditions of this permit are acceptable, and that I am authorized to execute this application for permit for the above referenced facility

Signature

Date

Printed Name and Title of Signer

If you have any questions concerning this letter, please contact a Permit Analyst at 217/782-2113.

Donald E Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:bsk

CC: Region 1



APPLICATION FOR PERMIT RENEWAL/OPERATING PERMIT

AUGUST 01, 1992

217/732-2113

NORWOOD MARKING SYSTEMS
ATTN: LARRY J KOLLINS
2538 WISCONSIN AVENUE
OWNERS GROVE

IL 60515

APPLICATION NO: 07110042
ID NUMBER: 043030ADI
OPERATION OF:
DUST COLLECTOR

LOCATION:
NORWOOD MARK & EQUIPMENT CO
2538 WISCONSIN AVENUE
OWNERS GROVE IL 60515

THE ABOVE REFERENCED OPERATING PERMIT WILL EXPIRE ON JANUARY 31, 1993. THE AGENCY RECOMMENDS THAT YOU APPLY FOR A RENEWAL OF THIS OPERATING PERMIT AT LEAST NINETY (90) DAYS PRIOR TO ITS EXPIRATION.

IF YOUR OPERATION IS UNCHANGED, YOU MAY REQUEST TO RENEW YOUR PERMIT BY SIGNING IN THE SPACE PROVIDED BELOW, KEEPING ONE COPY FOR YOUR RECORDS, AND RETURNING THIS CORRESPONDENCE TO THE AGENCY. IF DATED AND SIGNED BY THE AGENCY THIS APPLICATION WILL BE RETURNED TO YOU AND WILL BE YOUR PERMIT.

IF THERE HAS BEEN A CHANGE OF ADDRESS, PLEASE INDICATE THIS BY CORRECTING THE ABOVE INFORMATION. IF THERE HAS BEEN A CHANGE OF OWNERSHIP, PROPER DOCUMENTATION MUST BE SUBMITTED TO ALLOW TRANSFER OF PERMIT(S). IF YOUR OPERATION HAS CHANGED FROM THAT DESCRIBED IN THE APPLICATION FILED WITH THIS AGENCY, THEN YOU MUST USE APPROPRIATE FORMS TO DESCRIBE ALL CHANGES AS PART OF THE APPLICATION. (SEE ENCLOSED REQUEST FOR PERMIT FORMS: APC-209).

RECEIVED

AUG 06 1992

IF THE OPERATION HAS BEEN PERMANENTLY DISCONTINUED, PLEASE SEND A LETTER TO THE AGENCY WITHDRAWING THIS PERMIT. IF THE OPERATION HAS BEEN INCLUDED IN ANOTHER PERMIT, PLEASE PROVIDE THE PERMIT NUMBER OF THE NEW PERMIT(S) AND A LETTER OF EXPLANATION.

I CERTIFY THAT THE ORIGINAL PERMIT INFORMATION REMAINS TRUE, CORRECT, AND CURRENT AND THAT I AM AUTHORIZED TO EXECUTE THIS APPLICATION FOR PERMIT RENEWAL.

Larry J. Kollins 8/4/92
SIGNATURE DATE

LARRY J. KOLLINS- PLANT MANAGER
PRINTED NAME AND TITLE OF SIGNER

FOR AGENCY USE ONLY

PERMIT EXPIRATION DATE: August 26, 1997

PERMIT IS GRANTED TO OPERATE THE ABOVE REFERENCED EQUIPMENT SUBJECT TO STANDARD CONDITIONS ATTACHED HERETO AND ANY SPECIAL CONDITIONS OF THE PREVIOUSLY GRANTED OPERATING PERMIT.

B.E.
8/21/92
Wish I

Donald E. Sutton

DONALD E. SUTTON, P.E.
MANAGER, PERMIT SECTION
DIVISION OF AIR POLLUTION CONTROL

CC: REGION 110



217/782-2110

OPERATING PERMIT

PERMITTEE

Horwood Marking Systems
Attention: Larry J. Collins
2538 Wisconsin Avenue
Downers Grove, Illinois 60515

Application No.: 27110042

I.D. No.: 043030ADI

Applicant's Designation:

Date Received: November 13, 1987

Subject: Dust Collector

Date Issued: February 16, 1988

Expiration Date: January 31, 1993

Location: 2538 Wisconsin Avenue, Downers Grove

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of Metal Engraving with Fabric Filter as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon a minimal hourly emission rate and negligible annual emissions (less than 0.1 ton/year) of particulate matter from metal engraving.

Terry Sweitzer
Terry A. Sweitzer, P.E.
Manager, Permit Section
Division of Air Pollution Control

TAS:JDC:ds:4636H/7

cc: Region 1
hbr



ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter III 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

APPLICATION FOR A PERMIT (A) <input type="checkbox"/> CONSTRUCT <input checked="" type="checkbox"/> OPERATE	FOR AGENCY USE ONLY I. D. NO. <u>04303CADI</u> PERMIT NO. <u>87110042</u> DATE <u>11-13-87</u>
NAME OF EQUIPMENT TO BE CONSTRUCTED OR OPERATED <u>DUST COLLECTOR</u> (B)	

1a. NAME OF OWNER: <u>NORWOOD MARKING SYSTEMS</u>		2a. NAME OF OPERATOR: <u>NORWOOD MARKING SYSTEMS</u>	
1b. STREET ADDRESS OF OWNER: <u>2538 Wisconsin Ave.</u>		2b. STREET ADDRESS OF OPERATOR: <u>2538 Wisconsin Ave.</u>	
1c. CITY OF OWNER: <u>Downers Grove</u>		2c. CITY OF OPERATOR: <u>Downers Grove</u>	
1d. STATE OF OWNER: <u>IL</u>	1e. ZIP CODE: <u>60515</u>	2d. STATE OF OPERATOR: <u>IL</u>	2e. ZIP CODE: <u>60515</u>

3a. NAME OF CORPORATE DIVISION OR PLANT: <u>NORWOOD MARKING SYSTEMS</u>		3b. STREET ADDRESS OF EMISSION SOURCE: <u>2538 Wisconsin Ave.</u>		
3c. CITY OF EMISSION SOURCE: <u>Downers Grove</u>	3d. LOCATED WITHIN CITY LIMITS: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	3e. TOWNSHIP: <u>DuPage</u>	3f. COUNTY: <u>DuPage</u>	3g. ZIP CODE: <u>60515</u>

4. ALL CORRESPONDENCE TO: (TITLE AND/OR NAME OF INDIVIDUAL) <u>Larry J. Kollins/Plant Superintendent</u>	5. TELEPHONE NUMBER FOR AGENCY TO CALL: <u>312-968-0646</u>
6. ADDRESS FOR CORRESPONDENCE: (CHECK ONLY ONE) <input type="checkbox"/> OWNER: <input checked="" type="checkbox"/> OPERATOR <input type="checkbox"/> EMISSION SOURCE	7. YOUR DESIGNATION FOR THIS APPLICATION: (C) _____

9. THE UNDERSIGNED HEREBY MAKES APPLICATION FOR A PERMIT AND CERTIFIES THAT THE STATEMENTS CONTAINED HEREIN ARE TRUE AND CORRECT, AND FURTHER CERTIFIES THAT ALL PREVIOUSLY SUBMITTED INFORMATION REFERENCED IN THIS APPLICATION REMAINS TRUE, CORRECT AND CURRENT. BY AFFIXING HIS SIGNATURE HERETO HE FURTHER CERTIFIES THAT HE IS AUTHORIZED TO EXECUTE THIS APPLICATION.

AUTHORIZED SIGNATURE(S):

BY Larry J. Kollins 11/16/87
SIGNATURE DATE
Larry J. Kollins
TYPED OR PRINTED NAME OF SIGNER
Plant Superintendent
TITLE OF SIGNER

RECEIVED
BY NOV 13 1987 DATE
SIGNATURE
TYPED OR PRINTED NAME OF SIGNER
IEPA-DAPC-SPFLD.
TITLE OF SIGNER

- (A) THIS FORM IS TO PROVIDE THE AGENCY WITH GENERAL INFORMATION ABOUT THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS FORM MAY ONLY BE USED TO REQUEST ONE TYPE OF PERMIT - CONSTRUCTION OR OPERATION - AND NOT BOTH.
- (B) ENTER THE GENERIC NAME OF THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS NAME WILL APPEAR ON THE PERMIT WHICH MAY BE ISSUED PURSUANT TO THIS APPLICATION. THIS FORM MUST BE ACCOMPANIED BY OTHER APPLICABLE FORMS AND INFORMATION.
- (C) PROVIDE A DESIGNATION IN ITEM 7 ABOVE WHICH YOU WOULD LIKE THE AGENCY TO USE FOR IDENTIFICATION OF YOUR EQUIPMENT. YOUR DESIGNATION WILL BE REFERENCED IN CORRESPONDENCE FROM THIS AGENCY RELATIVE TO THIS APPLICATION. YOUR DESIGNATION MUST NOT EXCEED TEN (10) CHARACTERS.
- (D) THIS APPLICATION MUST BE SIGNED IN ACCORDANCE WITH PCB REGS., CHAPTER 2, PART 1, RULE 103(a)(4) OR 103(b)(5) WHICH STATES: "ALL APPLICATIONS AND SUPPLEMENTS THERETO SHALL BE SIGNED BY THE OWNER AND OPERATOR OF THE EMISSION SOURCE OR AIR POLLUTION CONTROL EQUIPMENT, OR THEIR AUTHORIZED AGENT, AND SHALL BE ACCOMPANIED BY EVIDENCE OF AUTHORITY TO SIGN THE APPLICATION."

IF THE OWNER OR OPERATOR IS A CORPORATION, SUCH CORPORATION MUST HAVE ON FILE WITH THE AGENCY A CERTIFIED COPY OF A RESOLUTION OF THE CORPORATION'S BOARD OF DIRECTORS AUTHORIZING THE PERSONS SIGNING THIS APPLICATION TO CAUSE OR ALLOW THE CONSTRUCTION OR OPERATION OF THE EQUIPMENT TO BE COVERED BY THE PERMIT.



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

This agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 240, Section 1039. Disclosure of this information is required under that section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

*DATA AND INFORMATION

AIR POLLUTION CONTROL EQUIPMENT

*THIS INFORMATION FORM IS FOR AN INDIVIDUAL UNIT OF AIR POLLUTION CONTROL EQUIPMENT OR AN AIR POLLUTION CONTROL SYSTEM.

1. NAME OF OWNER: <u>NORWOOD MARKING SYSTEMS</u>	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER):
3. STREET ADDRESS OF CONTROL EQUIPMENT: <u>2538 Wisconsin Ave.</u>	4. CITY OF CONTROL EQUIPMENT: <u>Downers Grove, IL</u>
5. NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: <u>DUST COLLECTOR</u>	

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION.
2. COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT, OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.
3. COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
4. EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION, THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.
5. EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OF THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION, AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.
6. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS", APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FROM THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
MAXIMUM OPERATION - THE GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.

CYCLONE

1. FLOW DIAGRAM DESIGNATION(S) OF CYCLONE:

2. MANUFACTURER:

3. MODEL:

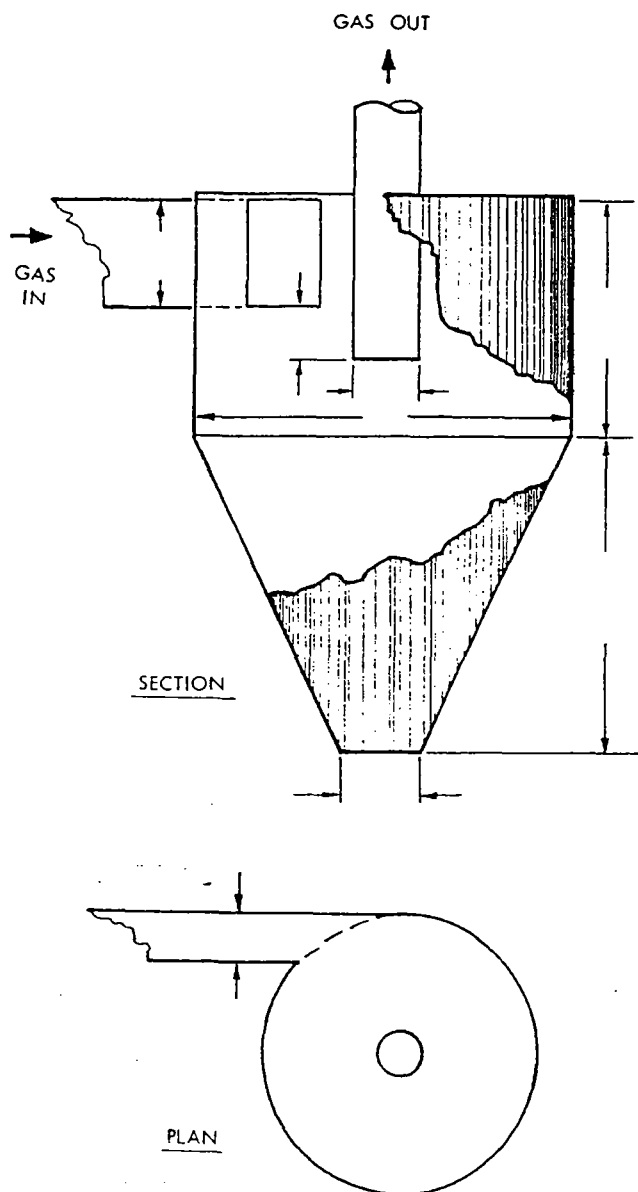
4. TYPE OF CYCLONE:

5. NUMBER OF CYCLONES IN EACH MULTIPLE CYCLONE:

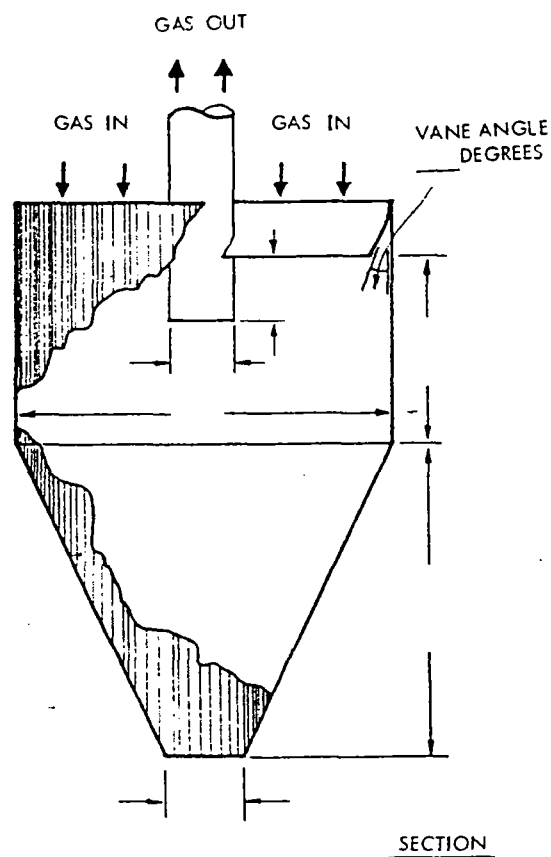
☐ SIMPLE ☐ MULTIPLE

6. DIMENSION THE APPROPRIATE SKETCH (IN INCHES) OR PROVIDE A DRAWING WITH EQUIVALENT INFORMATION:

TANGENTIAL INLET CYCLONE



AXIAL INLET CYCLONE (INDIVIDUAL CYCLONE OF MULTIPLE CYCLONE)



NOT TO SCALE

AVERAGE OPERATION OF SOURCE

MAXIMUM OPERATION OF SOURCE

7. GAS FLOW RATE:

SCFM

9. GAS FLOW RATE:

SCFM

8. EFFICIENCY OF CYCLONE (SEE INSTRUCTION 4):

%

10. EFFICIENCY OF CYCLONE (SEE INSTRUCTION 4):

%

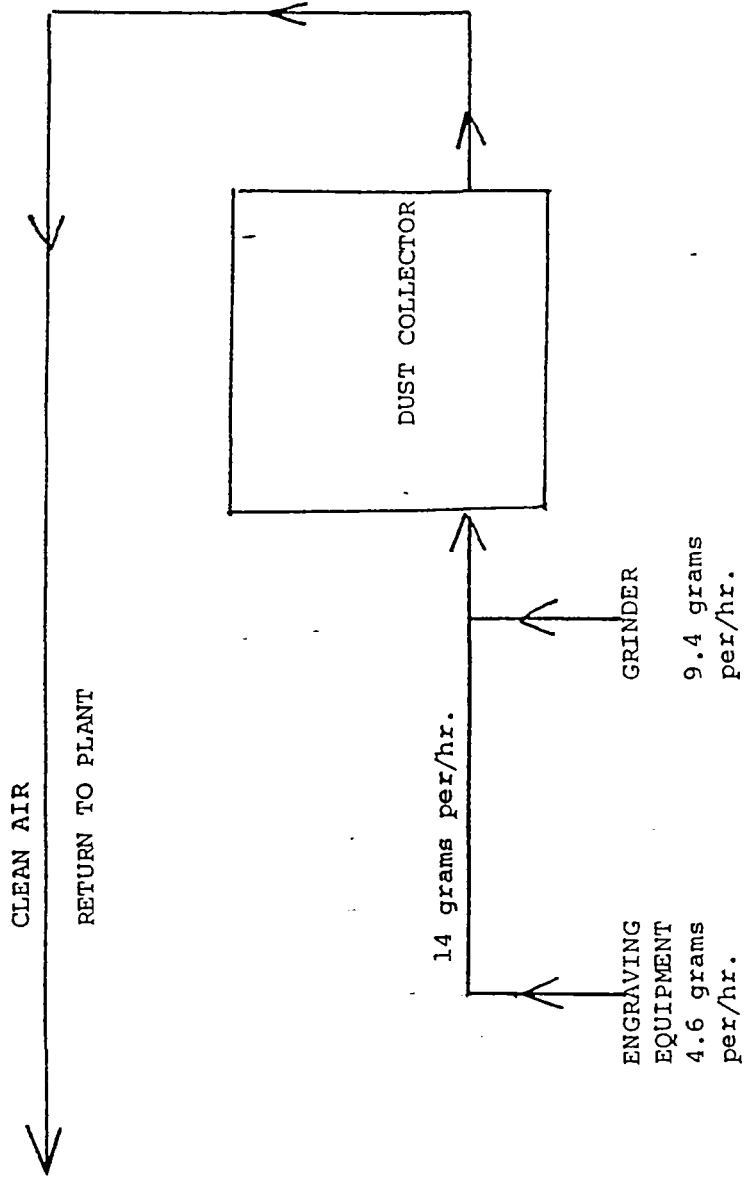
SCRUBBER

1. FLOW DIAGRAM DESIGNATION(S) OF SCRUBBER:	
2. MANUFACTURER:	3. MODEL NAME AND NUMBER:
4. TYPE OF SCRUBBER: <input type="checkbox"/> HIGH ENERGY: GAS STREAM PRESSURE DROP _____ INCH. H ₂ O <input type="checkbox"/> PACKED: PACKING TYPE _____, PACKING SIZE _____, PACKED HEIGHT _____ IN. <input type="checkbox"/> SPRAY: NUMBER OF NOZZLES _____, NOZZLE PRESSURE _____ PSIG <input type="checkbox"/> OTHER: SPECIFY _____ ATTACH DESCRIPTION AND SKETCH WITH DIMENSIONS	
5. TYPE OF FLOW: <input type="checkbox"/> COCURRENT <input type="checkbox"/> COUNTERCURRENT <input type="checkbox"/> CROSSFLOW	
6. SCRUBBER GEOMETRY: LENGTH IN DIRECTION OF GAS FLOW _____ IN., CROSS-SECTIONAL AREA _____ SQUARE IN.	
7. CHEMICAL COMPOSITION OF SCRUBBANT:	

AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE
8. SCRUBBANT FLOW RATE: <div style="text-align: right;">GPM</div>	12. SCRUBBANT FLOW RATE: <div style="text-align: right;">GPM</div>
9. GAS FLOW RATE: <div style="text-align: right;">SCFM</div>	13. GAS FLOW RATE: <div style="text-align: right;">SCFM</div>
10. INLET GAS TEMPERATURE: <div style="text-align: right;">°F</div>	14. INLET GAS TEMPERATURE: <div style="text-align: right;">°F</div>
11. EFFICIENCY OF SCRUBBER (SEE INSTRUCTION 4): _____ % PARTICULATE _____ % GASEOUS	15. EFFICIENCY OF SCRUBBER (SEE INSTRUCTION 4): _____ % PARTICULATE _____ % GASEOUS

OTHER TYPE OF CONTROL EQUIPMENT		
1. FLOW DIAGRAM DESIGNATION(S) OF "OTHER TYPE" OF CONTROL EQUIPMENT:		
2. GENERIC NAME OF "OTHER" EQUIPMENT:	3. MANUFACTURER:	4. MODEL NAME AND NUMBER:
5. DESCRIPTION AND SKETCH, WITH DIMENSIONS AND FLOW RATES, OF "OTHER" EQUIPMENT:		

AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE
6. FLOW RATES: _____ GPM _____ SCFM	8. FLOW RATES: _____ GPM _____ SCFM
7. EFFICIENCY OF "OTHER" EQUIPMENT (SEE INSTRUCTION 4): <div style="text-align: right;">%</div>	9. EFFICIENCY OF "OTHER" EQUIPMENT (SEE INSTRUCTION 4): <div style="text-align: right;">%</div>



007 44 567

AGET MANUFACTURING COMPANY



1408 EAST CHURCH STREET • P.O. BOX 248 • ADRIAN, MICHIGAN 49221 • FAX 517 263-7154 • PHONE 517 263-5781

October 28, 1987

Norwood Marking Machine
2538 Wisconsin
Downers Grove, IL 60515

Attention: Debbie

Dear Debbie:

The DUSTKOP Model 30N51-D1, serial #4323, shipped 5/2/78 is illustrated on print 3051-C-320. This print also contains the parts list and air handling capacity.

The FT40-D1 DUSTKOP After-Filter, serial #3676, shipped 5/2/78 is illustrated on print FT40-C-314. This model was supplied with a motor shaker, and has 383 square feet of filter area. The standard filter media supplied is cotton sateen.

The normal operating range for most applications is 1800 CFM at 6.65" static pressure to 2100 CFM at 5.1" of external static pressure. These are marked on the corner of the print.

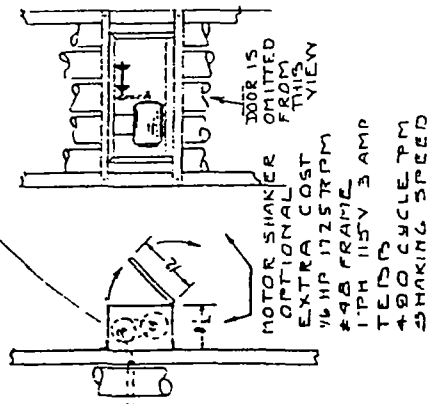
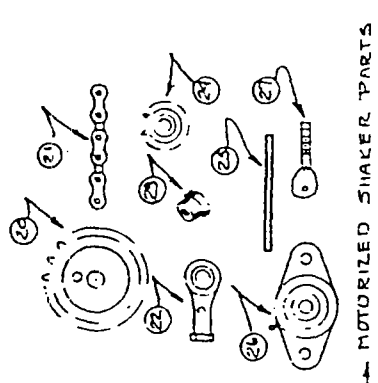
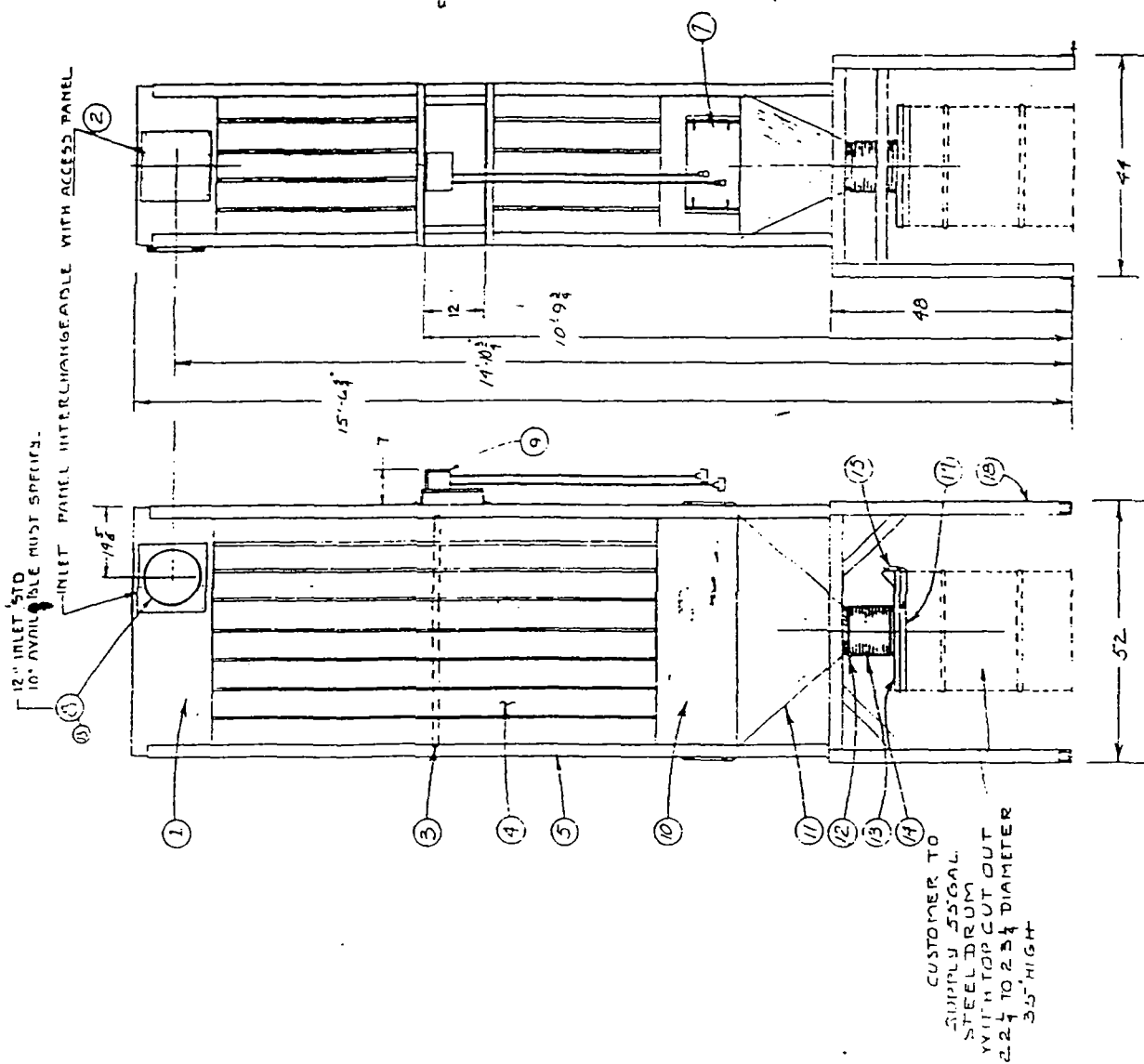
Yours very truly,

AGET MANUFACTURING COMPANY

Ray Wakefield
President

RW:kg

Enclosures



MOTOR SHAKER PARTS IF USED	
29	CONNECTING TROD
28	BEARING 1/2"
27	SHAFT 1/2" 17 1/2"
26	SPROCKET 35-10 1/2"
25	SPACER
24	ROD END BEARING 1/2"
23	CHAIN NO 35 18 1/2" LG.
22	SPECKET 35 18 1/2"

DI STAND	
16	DI STAND
17	DRUM BAND
18	DRUM COVER LATCH
19	DRUM COVER - D-C
20	FAIRLEAD HOSE 10' 12" LG
21	10" DIAM. HOSE CLAMP
22	HOPPER
23	POST BIN
24	ROPE SHAKER ASSY
25	INLET FLANGE 10" DIA 12"
26	CLEAN OUT DOOR 1150
27	GRIMMET T3
28	UPRIGHT ANGLES
29	4" FILTER TUBES
30	SHAKER ASSY.
31	ACCESS PANEL
32	TUBE PLENUM
33	PARTS LIST

FILTER AREA 303 SQ. FT.
 SHIPPING WEIGHT
 ROPE SHAKER 925#
 MOTOR SHAKER 925#

ITEM	QUANTITY	UNIT
1	1	EA
2	1	EA
3	1	EA
4	1	EA
5	1	EA
6	1	EA
7	1	EA
8	1	EA
9	1	EA
10	1	EA
11	1	EA
12	1	EA
13	1	EA
14	1	EA
15	1	EA
16	1	EA
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10078
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276

Mary A. Gade, Director

217/782 - 0610

December 7, 1998

Mr. Robert Hitchcock
Operations Manager
Norwood Marking Systems
2538 Wisconsin Avenue
Downers Grove, Illinois 60515-4293

Handwritten: 3/10/99
Handwritten: [unclear]
Handwritten: [unclear]
Handwritten: [unclear]

Re: Norwood Marking Systems -- Downers Grove Facility
Applicability of the Illinois General NPDES Permit for Industrial Storm Water Discharges
Termination of Permit No. ILR000175

Dear Mr. Hitchcock:

Thank you for your letter of November 12, 1998 regarding the need for an NPDES permit for the discharge of storm water associated with industrial activities from your Downers Grove facility.

Our records are inconsistent regarding the Standard Industrial Classification (SIC) code for this facility, but they indicate that it is either in Major Group 34, Fabricated Metal Products, Except Machinery and Transportation Equipment, or in Major Group 35, Industrial and Commercial Machinery and Computer Equipment. In either case, the facility is in category xi of 40 CFR 122.26 (b)(14), and does not need an NPDES storm water permit if industrial activities are not exposed to storm water.

We understand that no material handling equipment and activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. Under the provisions of 40 CFR 122.26 (b)(14)(xi), facilities that report having no exposure of storm water to the above-mentioned materials or activities are not required to obtain this permit, and Permit No. ILR000175 is hereby terminated effective immediately.

I hope this adequately responds to your request, but if you have any questions or comments regarding the above, or if we can be of any further assistance, please contact Chuck Fellman at the above telephone number and address.

Very truly yours,

Thomas G. McSwiggin, P. E.
Manager, Permit Section
Division of Water Pollution Control

TGM:CWF:\norwood

cc: Records Unit
FOS - Maywood



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-0610

2200 Churchill Road, Springfield, IL 62794-9276

May 5, 1993

LARRY KOLLINS
NORWOOD MARKING SYSTEMS
2538 WISCONSIN AVENUE
DOWNERS GROVE, IL. 60515

Re: NORWOOD MARKING SYSTEMS - DOWNERS GROVE
NPDES Permit No. ILR000175
Notice of Coverage under General Permit

Dear NPDES Permittee:

We have reviewed your application and determined that storm water discharges associated with industrial activity (excluding construction sites) are appropriately covered by the attached General NPDES Permit issued by the Agency.

The permit as issued covers application requirements, a storm water pollution prevention plan, and reporting requirements. The storm water pollution prevention plan must be completed within 180 days of this notification of coverage and shall provide for compliance within 365 days of this notification of coverage.

Failure to meet any portion of the permit could result in civil and/or criminal penalties. The Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Permit is applied to your discharge effective on the date of this letter. You have the right to appeal the Agency's decision to cover your discharge by the General Permit to the Illinois Pollution Control Board within a 30 day period following the date of this letter.

This letter shows your facility permit number below your facility name. Please reference this number in all future correspondence. Should you have any questions concerning the Permit, please contact the Permit Section at 217/782-0610.

Very truly yours,

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:ANT:a

Enclosure

cc: Records Unit
Region 2

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NPDES Permit

Expiration Date: October 1, 1997

Issue Date: October 16, 1992

Discharges authorized by this General Permit: In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act, the following discharges may be authorized by this permit in accordance with the conditions herein:

Discharges of storm water associated with industrial activity, as defined and limited herein. Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

This general permit regulates only storm water discharges from a facility. Other discharges such as process wastewater or cooling water shall be regulated by other NPDES permits.

Receiving waters: Discharges may be authorized to any surface water of the State.

To receive authorization to discharge under this general permit, a facility operator must submit an application as described in the permit conditions to the Illinois Environmental Protection Agency. Authorization, if granted, will be by letter and include a copy of this permit.



Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

CONTENTS OF THIS GENERAL PERMIT

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A. APPLICABILITY OF THIS GENERAL PERMIT

This permit is applicable to new and existing storm water discharges associated with industrial activity in the State of Illinois from the facilities listed below.

1. Discharges of storm water from facilities whose process wastewater discharges are subject to new source performance standards or toxic pollutant effluent standards under 40 CFR Subchapter N, except:
 - a. discharges subject to new source performance standards or toxic pollutant effluent standards and described in paragraph A.8. below which do not have materials or activities exposed to storm water;
 - b. discharges subject to storm water effluent limitations guidelines listed in 8.1. of this permit.
2. Discharges from manufacturing facilities in the following categories:

SIC 24	(Lumber and wood products except furniture) except SIC 2434 (Wood kitchen cabinets)
SIC 26	(Paper and allied products) except SIC 265 (Paperboard containers and boxes from purchased paperboard) and SIC 267 (Converted paper and paperboard products, except containers and boxes)
SIC 28	(Chemicals and allied products) except SIC 283 (Drugs)
SIC 29	(Petroleum refining and related industries), except discharges subject to 40 CFR 419
SIC 311	(Leather tanning and finishing)
SIC 32	(Stone, clay, glass, and concrete products) except SIC 323 (Glass products made of purchased glass)
SIC 33	(Primary metal industries)
SIC 3441	(Fabricated structural metal)
SIC 373	(Ship and boat building and repairing)
3. Facilities classified as SIC Codes 10-14 (Mineral Industry) including active or inactive mining operations and oil and gas exploration, production, processing, treatment operations, or transmission facilities, except discharges subject to 40 CFR 434, 436, or 440.
4. Landfills, land application sites (excluding land application sites which utilize agricultural land), and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described in 40 CFR 122.26(b)(14)).
5. Facilities involved in the recycling of materials including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards including but not limited to SIC 5015 (Used motor vehicle parts) and SIC 5093 (Scrap and waste materials)
6. Transportation facilities--portions of the following facilities involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations:

SIC 40	(Railroad transportation)
SIC 41	(Local and suburban transit and inter-urban highway passenger transportation)
SIC 42	(Motor freight transportation and warehousing) except SIC 4221-4225 (Farm product warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)
SIC 43	(United States Postal Service)
SIC 44	(Water transportation)
SIC 45	(Transportation by air)
SIC 5171	(Petroleum bulk stations and terminals-wholesale)

7. Treatment Works treating domestic sewage with a design flow of 1 MGD or more, or required to have an approved pretreatment program; includes sludge or wastewater treatment devices or systems used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, and land dedicated to sludge disposal located within the confines of the facility; excludes off-site sludge management lands, farm lands, and gardens.
8. Facilities in the following SIC Codes with storm water discharges from areas (except access roads and rail lines) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water.

SIC 20 (Food and kindred products manufacturing or processing)
 SIC 21 (Tobacco products)
 SIC 22 (Textile mill products)
 SIC 23 (Apparel and other finished products made from fabrics and similar materials)
 SIC 2434 (Wood kitchen cabinets)
 SIC 25 (Furniture and fixtures)
 SIC 265 (Paperboard containers and boxes)
 SIC 267 (Converted paper and paperboard products, except containers and boxes)
 SIC 27 (Printing, publishing, and allied industries)
 SIC 283 (Drugs)
 SIC 285 (Paints, varnishes, lacquers, enamels, and allied products)
 SIC 30 (Rubber and miscellaneous plastics products)
 SIC 31 (Leather and leather products) except SIC 311 (Leather tanning and finishing)
 SIC 323 (Glass products, made of purchased glass)
 SIC 34 (Fabricated metal products, except machinery and transportation equipment) except SIC 3441 (Fabricated structural metal)
 SIC 35 (Industrial and commercial machinery and computer equipment)
 SIC 36 (Electronic and other electrical equipment and components, except computer equipment)
 SIC 37 (Transportation equipment) except SIC 373 (Ship and boat building and repairing)
 SIC 38 (Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks)
 SIC 39 (Miscellaneous manufacturing industries)
 SIC 4221-25 (Farm products warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)

B. TYPES OF DISCHARGES NOT COVERED BY THIS PERMIT

This permit is not applicable to storm water discharges from the following facilities:

1. Discharges subject to storm water effluent limitations guidelines in the following categories:

Cement Manufacturing (40 CFR 411)
 Feedlots (40 CFR 412)
 Fertilizer Manufacturing (40 CFR 418)
 Petroleum Refining (40 CFR 419)
 Phosphate Manufacturing (40 CFR 422)
 Steam Electric (40 CFR 423)
 Coal Mining (40 CFR 434)
 Mineral Mining and Processing (40 CFR 436)
 Ore Mining and Dressing (40 CFR 440)
 Asphalt Emulsion (40 CFR 443)

2. Hazardous waste treatment, storage or disposal facilities.
3. Steam electric power generating facilities, including coal handling sites.
4. Construction activity including clearing, grading and excavation activities.
5. Storm water discharges associated with industrial activity from facilities with an existing NPDES individual or general permit for the storm water discharges.
6. Storm water discharges associated with industrial activity which are identified by the Agency as possibly causing or contributing to a violation of water quality standards.
7. Storm water discharges associated with inactive mining or inactive oil and gas operations occurring on Federal lands where an operator cannot be identified.
8. Storm water discharges that the Agency determines are not appropriately covered by this general permit.¹

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill, and does not supercede any reporting requirements for spills or releases of hazardous substances or oil.

C. APPLICATION REQUIREMENTS

1. Dischargers seeking coverage under this general permit shall provide the Illinois Environmental Protection Agency (IEPA) with the following information:
 - a. A completed IEPA Notice of Intent form, accompanied by quantitative sampling data for the storm water discharge(s) if available; or
 - b. A completed U.S. EPA Form 1, including Form 2F and quantitative sampling data if available; or
 - c. A completed U.S. EPA Notice of Intent form, accompanied by quantitative sampling data for the storm water discharge (s) if available.
 - d. Participation in a group application accepted by U.S. EPA shall also be considered as an application for coverage under this general permit, subject to the applicability provisions of this permit.
2. Quantitative sampling data as required by U.S. EPA Form 2F for storm water discharges from the following facilities is required to be submitted, unless the facility is a participant in a group application accepted by U.S. EPA. Applications submitted without sample results will be considered complete if sample results are submitted before April 1, 1993.
 - a. Facilities subject to reporting requirements under Section 313 of EPCRA for chemicals classified as "Section 313 water priority chemicals": Storm water discharges that come into contact with any equipment, tank, container, or other vessel or area used for storage of a Section 313 water priority chemical, or located at a truck or rail car unloading area where a Section 313 water priority chemical is handled.
 - b. Facilities classified as SIC 33 (Primary Metal Industries).
 - c. Active or inactive landfills, land application sites, or open dumps without a stabilized final cover which have received any industrial wastes.
 - d. Wood treatment facilities: Storm water discharges from areas that are used for wood treatment, wood surface application, or storage of treated or surface protected wood.
 - e. Coal pile runoff at industrial facilities other than coal mines.
 - f. Battery reclaiming facilities: storm water discharges from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation.
 - g. Airports with over 50,000 flight operations per year: storm water discharges from aircraft or airport deicing areas.
 - h. Meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils.
 - i. Facilities classified as SIC 28 (Chemicals and Allied Products) and SIC 30 (Rubber and Miscellaneous Plastics Products): Storm water discharges that come into contact with solid chemical storage piles.
 - j. Automobile junkyards: Storm water discharges exposed to over 250 auto/truck bodies with drivelines, over 250 drivelines, or any combination thereof (in whole or in parts); over 500 auto/truck units (bodies with or without drivelines in whole or in parts); or over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water.
 - k. Lime manufacturing facilities: storm water discharges that have come into contact with lime storage piles.
 - l. Cement manufacturing facilities and cement kilns: Storm water discharges other than those subject to 40 CFR 411.
 - m. Ready-mixed concrete facilities.
 - n. Ship building and repairing facilities.
3. When a facility has two or more outfalls that, based on consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may sample the effluent of one such outfall and report that quantitative data also applies to the substantially identical outfalls. If the applicant is requesting approval to sample a representative outfall, identification of all

storm water outfalls considered to be substantially identical along with the outfall being used to represent such outfalls and appropriate justification must be provided with the application.

4. For existing facilities with an individual NPDES permit covering storm water associated with industrial activity, or those facilities who have previously submitted an application for an individual permit and not yet received a permit, the permittee/applicant may elect to seek coverage under this general permit in place of obtaining an individual permit. To be considered for coverage the permittee/applicant is required to submit the above information following the general permit issue date.
5. For new facilities, the NOI and required information shall be submitted 180 days prior to the date on which the discharge is to commence unless permission for a later date has been granted by the IEPA. Mobile facilities (such as concrete or asphalt batch plants) shall apply at least 30 days prior to discharge.
6. For purposes of the permit an existing facility shall be considered a facility which discharged storm water associated with industrial activity prior to the application deadline set by the U.S. EPA storm water regulations. A new facility is a facility which generates storm water after, but not before the deadline.
7. The required information shall be submitted to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
8. In any case where an NPDES Permit has been timely applied for but final administrative disposition of such application has not been made, it shall not be a violation of Section 12(F) of the Environmental Protection Act to discharge without such permit unless the complainant proves that final administrative disposition has not been made because of the failure of the applicant to furnish information reasonably required or requested in order to process the application. For purposes of this provision, participation in a group application filed with U.S. EPA shall be deemed an application filed with the Agency. This provision does not relieve the applicant from the responsibility for compliance with any other requirement of the Act or regulations promulgated under the Act.
9. Facilities which discharge storm water associated with industrial activity to a municipal separate storm sewer system shall notify the municipality, and shall provide the municipality with a copy of their application if requested.

D. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

1. A storm water pollution prevention plan shall be developed by the permittee for each facility covered by this permit. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.
2. The plan shall be completed within 180 days of notification by the Agency of coverage by this permit or in the case of new facilities, prior to submitting an NOI to be covered under this permit. Plans shall provide for compliance with the terms of the plan within 365 days of notification by the Agency of coverage by this permit, or in the case of new facilities, prior to submitting an NOI to be covered under this permit. The owner or operator of a facility with storm water discharges covered by this permit shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.
3. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this permit. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
4. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph 0.8. of this permit indicates that an amendment is needed. The plan should also be amended if the discharger is

in violation of any conditions of this permit, or has not achieved the general objectives of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, and shall be provided to the Agency for review upon request.

5. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from the facility. The plan shall include, at a minimum, the following items:

a. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.

b. A site map showing:

- i. The storm water conveyance and discharge structures;
- ii. An outline of the storm water drainage areas for each storm water discharge point;
- iii. Paved areas and buildings;
- iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
- v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
- vi. Surface water locations and/or municipal storm drain locations
- vii. Areas of existing and potential soil erosion;
- viii. Vehicle service areas;
- ix. Material loading, unloading, and access areas.

c. A narrative description of the following:

- i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
- ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges; - oil day
- iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges; - vibration, dock PARTIALLY COVERED (concrete) handling
- iv. Industrial storm water discharge treatment facilities;
- v. Methods of onsite storage and disposal of significant materials; - spread inside and outside on as needed basis not to exceed a certain time period.

d. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. - oil

e. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.

f. A summary of existing sampling data describing pollutants in storm water discharges.

6. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:

(a.) Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan. - full time

(b.) Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water. - maintenance schedule

- c. **Good Housekeeping** - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
- d. **Spill Prevention and Response** - Identification of areas ^{maybe the unloading dock} where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
- e. **Storm Water Management Practices** - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. ~~Based on assessment of the potential of various sources to contribute pollutants,~~ measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
- i. **Containment** - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff;
 - ii. **Oil & Grease Separation** - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges;
 - iii. **Debris & Sediment Control** - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges;
 - iv. **Waste Chemical Disposal** - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges. *used oils picked up & disposed of at landfill*
 - v. **Storm Water Diversion** - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination; *asphalt sloping away from building*
 - vi. **Covered Storage or Manufacturing Areas** - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water. *process area with building surrounding docks, area partially covered*
- f. **Sediment and Erosion Prevention** - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion and describe measures to limit erosion.
- g. **Employee Training** - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
- h. **Inspection Procedures** - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
7. **Non-Storm water Discharges** - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include a description of any tests for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible. Discharges not comprised entirely of storm water are not authorized by this permit.
8. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls, to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
9. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.
10. The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim portions of the plan as confidential business information, including any portion describing facility security measures.

11. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
12. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirements imposed by the operator of the municipal system.

E. CONSTRUCTION AUTHORIZATION

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

1. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee thereupon waives all rights thereunder.
2. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
3. Plans and specifications of all treatment equipment being included as a part of the stormwater management practice shall be included in the SWPPP.
4. Any modification of or deviation from the plans and specifications originally submitted with the initial SWPPP requires amendment of the SWPPP.
5. Construction activities which result from treatment equipment installation, including cleaning, grading and excavation activities which result in the disturbance of five acres or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding required permit(s).

F. REPORTING

1. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part 8 of the Storm Water Pollution Prevention Plan of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s).
2. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
3. Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
Annual Inspection Report
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276
4. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

G. TERMINATION OF COVERAGE UNDER THIS PERMIT

1. Where all storm water discharges associated with industrial activity that have been authorized by this permit are eliminated, the operator of the facility may submit a termination request to the Agency at the address shown on Page 5 of this permit. The termination request shall include the name, address, telephone number, and location of the facility, and a description of actions taken to eliminate the storm water discharge or other justification for the request. Coverage under this permit is not terminated until the Agency acts on the termination request, and reports as described above are required until coverage is terminated.

2. The Agency may require any person authorized by this permit to apply for and obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. The Agency may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. The Agency may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application required by the Agency under this paragraph then the applicability of this permit to the individual NPDES permitted is automatically terminated at the end of the day specified for application submittal.
3. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request, in accordance with the requirements of 40 CFR 122.28, to the Agency. The request shall be granted by issuing of an individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.
4. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the issue date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied coverage under an alternative NPDES general permit the applicability of this permit to the individual NPDES permitted is automatically terminated on the date of such denial, unless otherwise specified by the Agency.

H. RENEWAL

1. Application forms for renewal procedures, including coverage under this general permit, will be available approximately one year prior to the expiration date.
2. Any Permittee who wishes to continue to discharge after the expiration date of this general permit shall apply for reissuance of the permit not less than 180 days prior to the expiration date of this permit.

I. DEFINITIONS

1. Coal pile runoff means the rainfall runoff from or through any coal storage pile.
2. Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.
3. Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well or waste pile.
4. Section 313 water priority chemical means a chemical or chemical categories which: 1) Are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) Are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.
5. Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
6. Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

Note that additional definitions are included in the permit Standard Conditions, Attachment H.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 Mary A. Gade, Director

217/782-0610

June 15, 1998

ROBERT HITCHCOCK

~~LARRY KOLLINS~~

NORWOOD MARKING SYSTEMS

2538 WISCONSIN AVENUE

DOWNERS GROVE, IL. 60515

Re: NORWOOD MARKING SYSTEMS - DOWNERS GROVE FACILITY

NPDES Permit No. ILR000175

Notice of Coverage under General Permit

Dear NPDES Permittee:

Enclosed is a copy of the reissued general NPDES permit for discharges of industrial storm water and the new annual report forms.

The permit as issued covers application requirements, a storm water pollution prevention plan, and reporting requirements. For dischargers not previously covered by an NPDES storm water permit, the storm water pollution prevention plan must be completed within 180 days of this notification of coverage and shall provide for compliance within 365 days of this notification of coverage.

Failure to meet any portion of the permit could result in civil and/or criminal penalties. The Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Permit is applied to your discharge effective on the date of this letter. You have the right to appeal the Agency's decision to cover your discharge by the General Permit to the Illinois Pollution Control Board within a 35 day period following the date of this letter.

This letter shows your facility permit number below your facility name. Please reference this number in all future correspondence. Should you have any questions concerning the Permit, please contact the Permit Section at 217/782-0610.

Very truly yours,

A handwritten signature in black ink, appearing to read "Thomas G. McSwiggin", written over a horizontal line.

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:MED:a

Enclosure

cc: Records Unit
Region 2

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
ANNUAL FACILITY INSPECTION REPORT
NPDES PERMIT FOR STORM WATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL SITE ACTIVITIES**

Complete each section of this report form. Place a NA in sections that do not apply to your operation

REPORT PERIOD: FROM	TO
----------------------------	-----------

OWNER/OPERATOR INFORMATION: AS IT APPEARS ON THE CURRENT PERMIT

NAME		TELEPHONE NO
MAILING ADDRESS		
CITY	STATE	ZIP
CONTACT PERSON Person responsible for Annual Report		

FACILITY/SITE INFORMATION: AS IT APPEARS ON THE CURRENT PERMIT

FACILITY NAME	PERMIT NO I L R _ _ _ _ _	
FACILITY MAILING ADDRESS		
CITY	STATE	ZIP
COUNTY	PRIMARY SIC CODE	
CONTACT PERSON	TELEPHONE NO.	
FACILITY ADDRESS If different from mailing address		

RECEIVING WATER INFORMATION

STORM SEWER	OWNER NAME
WATERS OF THE STATE	CLOSEST RECEIVING WATERS

ADDITIONAL INFORMATION

<p>Has this facility received an NPDES Permit under a different owner/operator name in the past? If so, list last name permit was issued to:</p>
<p>Attach information on any activity that has occurred at this facility during the report period that may have resulted in pollutants discharged to storm water runoff (e.g. Spills)</p> <p>Attach information on any changes to the facility or the activity occurring at the facility that resulted in significant changes to the SWPPP.</p>

SIGNATURE	DATE
------------------	-------------

Retain pink copy,
submit original &
yellow copy to:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

General NPDES Permit No. ILR00

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand East
P.O. Box 19276
Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

**General NPDES Permit
For
Industrial Storm Water**

Expiration Date: May 31, 2003

Issue Date: May 19, 1998

Effective Date: June 1, 1998

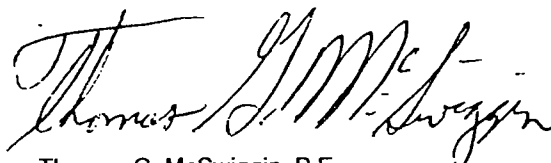
Discharges authorized by this General Permit: In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act, the following discharges may be authorized by this permit in accordance with the conditions herein:

Discharges of storm water associated with industrial activity, as defined and limited herein. Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

This general permit regulates only storm water discharges from a facility. Other discharges such as process wastewater or cooling water shall be regulated by other NPDES permits.

Receiving waters: Discharges may be authorized to any surface water of the State.

To receive authorization to discharge under this general permit, a facility operator must either submit an application as described in the permit conditions to the Illinois Environmental Protection Agency or have a valid Illinois General NPDES Permit for industrial storm water. Authorization, if granted, will be by letter and include a copy of this permit.



Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

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A. APPLICABILITY OF THIS GENERAL PERMIT

This permit is applicable to new and existing storm water discharges associated with industrial activity in the State of Illinois from the facilities listed below.

1. Discharges of storm water from facilities whose process wastewater discharges are subject to new source performance standards or toxic pollutant effluent standards under 40 CFR Subchapter N, except:
 - a. discharges subject to new source performance standards or toxic pollutant effluent standards and described in paragraph A.8. below which do not have materials or activities exposed to storm water;
 - b. discharges subject to storm water effluent limitations guidelines listed in B.1. of this permit.
2. Discharges from manufacturing facilities in the following categories:

SIC 24	(Lumber and wood products except furniture) except SIC 2434 (Wood kitchen cabinets)
SIC 26	(Paper and allied products) except SIC 265 (Paperboard containers and boxes from purchased paperboard) and SIC 267 (Converted paper and paperboard products, except containers and boxes)
SIC 28	(Chemicals and allied products) except SIC 283 (Drugs)
SIC 29	(Petroleum refining and related industries), except discharges subject to 40 CFR 419
SIC 311	(Leather tanning and finishing)
SIC 32	(Stone, clay, glass, and concrete products) except SIC 323 (Glass products made of purchased glass)
SIC 33	(Primary metal industries)
SIC 3441	(Fabricated structural metal)
SIC 373	(Ship and boat building and repairing)
3. Facilities classified as SIC Codes 10-14 (Mineral Industry) including active or inactive mining operations and oil and gas exploration, production, processing, treatment operations, or transmission facilities, except discharges subject to 40 CFR 434, 436, or 440.
4. Landfills, land application sites (excluding land application sites which utilize agricultural land), and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described in 40 CFR 122.26(b)(14)).
5. Facilities involved in the recycling of materials including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards including but not limited to SIC 5015 (Used motor vehicle parts) and SIC 5093 (Scrap and waste materials)
6. Transportation facilities-portions of the following facilities involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations:

SIC 40	(Railroad transportation)
SIC 41	(Local and suburban transit and inter-urban highway passenger transportation)

SIC 42	(Motor freight transportation and warehousing) except SIC 4221-4225 (Farm product warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)
SIC 43	(United States Postal Service)
SIC 44	(Water transportation)
SIC 45	(Transportation by air)
SIC 5171	(Petroleum bulk stations and terminals-wholesale)

7. Treatment Works treating domestic sewage that are owned or operated by municipalities with a population of 100,000 people or more or that are privately-owned with a design flow of 1.0 mgd or more; includes sludge or wastewater treatment devices or systems used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, and land dedicated to sludge disposal located within the confines of the facility; excludes off-site sludge management lands, farm lands, and gardens.
8. Facilities in the following SIC Codes with storm water discharges from areas (except access roads and rail lines) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water.

SIC 20	(Food and kindred products manufacturing or processing)
SIC 21	(Tobacco products)
SIC 22	(Textile mill products)
SIC 23	(Apparel and other finished products made from fabrics and similar materials)
SIC 2434	(Wood kitchen cabinets)
SIC 25	(Furniture and fixtures)
SIC 265	(Paperboard containers and boxes)
SIC 267	(Converted paper and paperboard products, except containers and boxes)
SIC 27	(Printing, publishing, and allied industries)
SIC 283	(Drugs)
SIC 285	(Paints, varnishes, lacquers, enamels, and allied products)
SIC 30	(Rubber and miscellaneous plastics products)
SIC 31	(Leather and leather products) except SIC 311 (Leather tanning and finishing)
SIC 323	(Glass products, made of purchased glass)
SIC 34	(Fabricated metal products, except machinery and transportation equipment) except SIC 3441 (Fabricated structural metal)
SIC 35	(Industrial and commercial machinery and computer equipment)
SIC 36	(Electronic and other electrical equipment and components, except computer equipment)
SIC 37	(Transportation equipment) except SIC 373 (Ship and boat building and repairing)
SIC 38	(Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks)
SIC 39	(Miscellaneous manufacturing industries)
SIC 4221-25	(Farm products warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)

B. TYPES OF DISCHARGES NOT COVERED BY THIS PERMIT

This permit is not applicable to storm water discharges from the following facilities:

1. Discharges subject to storm water effluent limitations guidelines in the following categories;
 - Cement Manufacturing (40 CFR 411)
 - Feedlots (40 CFR 412)
 - Fertilizer Manufacturing (40 CFR 418)
 - Petroleum Refining (40 CFR 419)
 - Phosphate Manufacturing (40 CFR 422)
 - Steam Electric (40 CFR 423)
 - Coal Mining (40 CFR 434)
 - Mineral Mining and Processing (40 CFR 436)
 - Ore Mining and Dressing (40 CFR 440)
 - Asphalt Emulsion (40 CFR 443)
2. Hazardous waste treatment, storage or disposal facilities.
3. Steam electric power generating facilities, including coal handling sites.

General NPDES Permit No. ILR00

4. Construction activity including clearing, grading and excavation activities.
5. Storm water discharges associated with industrial activity from facilities with an existing NPDES individual or general permit for the storm water discharges.
6. Storm water discharges associated with industrial activity which are identified by the Agency as possibly causing or contributing to a violation of water quality standards.
7. Storm water discharges associated with inactive mining or inactive oil and gas operations occurring on Federal lands where an operator cannot be identified.
8. Storm water discharges that the Agency determines are not appropriately covered by this general permit.

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill, and does not supercede any reporting requirements for spills or releases of hazardous substances or oil.

C. SPECIAL CONDITIONS

1. Prohibition on non-storm water discharges

- a. Except as provided in C. 1. b. below, all discharges covered by this permit shall be composed entirely of storm water.
- b. i. Except as provided in C. 1. b. ii. below, discharges of material other than storm water must be in compliance with an NPDES permit (other than this permit) issued for the discharge.
- ii. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharges is in compliance with paragraph E.7. of this permit: discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles without the use of detergents or control dust; potable water sources including waterline flushings; irrigation drainages; lawn watering; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

D. APPLICATION REQUIREMENTS

1. Dischargers that are covered by a valid Illinois General NPDES Permit for industrial storm water as of September 30, 1997 are automatically covered by this permit unless they request otherwise prior to the effective date of this permit. Other dischargers seeking coverage under this general permit shall provide the Illinois Environmental Protection Agency (IEPA) with the following information:
 - a. A completed IEPA Notice of Intent form, accompanied by quantitative sampling data for the storm water discharge(s) if available; or
 - b. A completed U.S. EPA Form 1, including Form 2F and quantitative sampling data if available; or
 - c. A completed U.S. EPA Notice of Intent form, accompanied by quantitative sampling data for the storm water discharge(s) if available.
2. Quantitative sampling data as required by U.S. EPA Form 2F for storm water discharges from the following facilities is required to be submitted, unless the facility is a participant in a group application accepted by U.S. EPA.
 - a. Facilities subject to reporting requirements under Section 313 of EPCRA for chemicals classified as "Section 313 water priority chemicals": Storm water discharges that come into contact with any equipment, tank, container, or other vessel or area used for storage of a Section 313 water priority chemical, or located at a truck or rail car unloading area where a Section 313 water priority chemical is handled.
 - b. Facilities classified as SIC 33 (Primary Metal Industries).
 - c. Active or inactive landfills, land application sites, or open dumps without a stabilized final cover which have received any industrial wastes.

- d. Wood treatment facilities: Storm water discharges from areas that are used for wood treatment, wood surface application, or storage of treated or surface protected wood.
 - e. Coal pile runoff at industrial facilities other than coal mines.
 - f. Battery reclaiming facilities: Storm water discharges from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation.
 - g. Airports with over 50,000 flight operations per year: storm water discharges from aircraft or airport deicing areas.
 - h. Meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils.
 - i. Facilities classified as SIC 28 (Chemicals and Allied Products) and SIC 30 (Rubber and Miscellaneous Plastics Products): Storm water discharges that come into contact with solid chemical storage piles.
 - j. Automobile junkyards: Storm water discharges exposed to over 250 auto/truck bodies with drivelines, over 250 drivelines, or any combination thereof (in whole or in parts); over 500 auto/truck units (bodies with or without drivelines in whole or in parts); or over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water.
 - k. Lime manufacturing facilities: Storm water discharges that have come into contact with lime storage piles.
 - l. Cement manufacturing facilities and cement kilns: Storm water discharges other than those subject to 40 CFR 411.
 - m. Ready-mixed concrete facilities. Sampling data is not required for new ready-mixed concrete facilities or for relocated ready-mixed concrete facilities.
 - n. Ship building and repairing facilities.
3. When a facility has two or more outfalls that, based on consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may sample the effluent of one such outfall and report that quantitative data also applied to the substantially identical outfalls. If the applicant is requesting approval to sample a representative outfall, identification of all storm water outfalls considered to be substantially identical along with the outfall being used to represent such outfalls and appropriate justification must be provided with the application.
4. For existing facilities with an individual NPDES permit covering storm water associated with industrial activity, or those facilities who have previously submitted an application for an individual permit and not yet received a permit, the permittee/applicant may elect to seek coverage under this general permit in place of obtaining an individual permit. To be considered for coverage the permittee/applicant is required to submit the above information following the general permit issue date.
5. For new facilities, the NOI and required information shall be submitted 180 days prior to the date on which the discharge is to commence unless permission for a later date has been granted by the IEPA. Mobile facilities (such as concrete or asphalt batch plants) shall apply at least 30 days prior to discharge.
6. For purposes of the permit an existing facility shall be considered a facility which discharged storm water associated with industrial activity prior to the application deadline set by the U.S. EPA storm water regulations. A new facility is a facility which generates storm water after, but not before the deadline.
7. The required information shall be submitted to the following address:
- Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
8. In any case where an NPDES Permit has been timely applied for but final administrative disposition of such application has not been made, it shall not be a violation of Section 12-F of the Environmental Protection Act to discharge without such permit unless the complainant proves that final administrative disposition has not been made because of the failure of the applicant to furnish information reasonably required or requested in order to process the application. For purposes of this provision, participation in a group application filed with U.S. EPA shall be deemed an application filed with the Agency. This provision does not relieve the applicant from the responsibility for compliance with any other requirement of the Act or regulations promulgated under the Act.

9. Facilities which discharge storm water associated with industrial activity to a municipal separate storm sewer system shall notify the municipality, and shall provide the municipality with a copy of their application if requested.

E. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

1. A storm water pollution prevention plan shall be developed by the permittee for each facility covered by this permit. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.
2. The plan shall be completed within 180 days of notification by the Agency of coverage by this permit or in the case of new facilities, prior to submitting an NOI to be covered under this permit. Plans shall provide for compliance with the terms of the plan within 365 days of notification by the Agency of coverage by this permit, or in the case of new facilities, prior to submitting an NOI to be covered under this permit. [Note: If the plan has already been required to be developed under a previous permit it shall be maintained in accordance with all requirements of this special condition.]. The owner or operator of a facility with storm water discharges covered by this permit shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

3. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this permit. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
4. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph E.8. of this permit indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objectives of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, and shall be provided to the Agency for review upon request.
5. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from the facility. The plan shall include, at a minimum, the following items:
 - a. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.
 - b. A site map showing:
 - i. The storm water conveyance and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point;
 - iii. Paved areas and buildings;
 - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
 - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
 - vi. Surface water locations and/or municipal storm drain locations
 - vii. Areas of existing and potential soil erosion;
 - viii. Vehicle service areas;

- ix. Material loading, unloading, and access areas.
 - c. A narrative description of the following:
 - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
 - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
 - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
 - iv. Industrial storm water discharge treatment facilities;
 - v. Methods of onsite storage and disposal of significant materials;
 - d. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities.
 - e. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
 - f. A summary of existing sampling data describing pollutants in storm water discharges.
6. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
- a. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
 - b. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
 - c. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
 - d. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
 - e. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
 - i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff;
 - ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges;
 - iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges;
 - iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.

- v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination;
 - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
 - f. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion and describe measures to limit erosion.
 - g. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
 - h. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
7. Non-Storm water Discharges - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include a description of any tests for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible. Except as provided in C.1. b., discharges not comprised entirely of storm water are not authorized by this permit.
 8. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
 9. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.
 10. The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim portions of the plan as confidential business information, including any portion describing facility security measures.
 11. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
 12. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirements imposed by the operator of the municipal system.

F. CONSTRUCTION AUTHORIZATION

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

1. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee thereupon waives all rights thereunder.
2. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.

3. Plans and specifications of all treatment equipment being included as a part of the stormwater management practice shall be included in the SWPPP.
4. Any modification of or deviation from the plans and specifications originally submitted with the initial SWPPP requires amendment of the SWPPP.
5. Construction activities which result from treatment equipment installation, including cleaning, grading and excavation activities which result in the disturbance of five acres or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding required permit(s).

G. REPORTING

1. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part 8 of the Storm Water Pollution Prevention Plan of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s).
2. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.

Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
Annual Inspection Report
1021 North Grand East
P.O. Box 19276
Springfield, Illinois 62794-9276

3. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

H. TERMINATION OF COVERAGE UNDER THIS PERMIT

Where all storm water discharges associated with industrial activity that have been authorized by this permit are eliminated, the operator of the facility may submit a termination request to the Agency at the address shown on Page 5 of this permit. The termination request shall include the name, address, telephone number, and location of the facility, and a description of actions taken to eliminate the storm water discharge or other justification for the request. Coverage under this permit is not terminated until the Agency acts on the termination request, and reports as described above are required until coverage is terminated.

1. The Agency may require any person authorized by this permit to apply for and obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. The Agency may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. The Agency may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application required by the Agency under this paragraph then the applicability of this permit to the individual NPDES permitted is automatically terminated at the end of the day specified for application submittal.
2. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request, in accordance with the requirements of 40 CFR 122.28, to the Agency. The request shall be granted by issuing of an individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.

3. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the issue date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied coverage under an alternative NPDES general permit the applicability of this permit to the individual NPDES permitted is automatically terminated on the date of such denial, unless otherwise specified by the Agency.

I. DEFINITIONS

1. Coal pile runoff means the rainfall runoff from or through any coal storage pile.
2. Land application site means an area where wastes are applied onto or incorporated into the soil surface for treatment or disposal.
3. Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application site, surface impoundment, injection well or waste pile.
4. Section 313 water priority chemical means a chemical or chemical categories which: 1) Are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) Are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.
5. Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
6. Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

Note that additional definitions are included in the permit Standard Conditions, Attachment H.

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, Ch. 111.1.2 Ill. Rev. Stat., Sec. 1001-1052 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L. 92-500, as amended, 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24 Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8 Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

- (6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit.
- (9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.
- (10) **Monitoring and records.**
 - (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. This period may be extended by request of the Agency at any time.
 - (c) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
 - (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.
- (11) **Signatory requirement.** All applications, reports or information submitted to the Agency shall be signed and certified.
 - (a) **Application.** All permit applications shall be signed as follows:
 - (1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation;
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
 - (b) **Reports.** All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in paragraph (a); and
 - (2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and
 - (3) The written authorization is submitted to the Agency.

- (c) Changes of Authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
- (12) Reporting requirements.
- (a) Planned changes. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Compliance schedule. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
- (2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.
- (e) Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:
- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
- (2) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit to be reported within 24 hours;
- The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- (f) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (12)(c), (d), or (e), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12)(e).
- (g) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.
- (13) Transfer of permits. A permit may be automatically transferred to a new permittee if:
- (a) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
- (b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees; and
- (c) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (14) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
- (1) One hundred micrograms per liter (100 ug/l),
- (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
- (3) Five (5) times the maximum concentration value reported for that pollutant in the NPOES permit application; or
- (4) The level established by the Agency in this permit.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPOES permit application.
- (15) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
- (a) Any new introduction of pollutants into that POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
- (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (16) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
- (1) User charges pursuant to Section 204(b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35.
- (2) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act, and
- (3) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
- (17) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.
- (18) Any authorization to construct issued to the permittee pursuant to 35 Ill. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.
- (19) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.
- (20) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than \$2,500, nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both.
- (21) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (22) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit shall, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (23) Collected screening, slimes, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.
- (24) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.
- (25) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board.
- (26) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

MAY 05 1993

Mary A. Gade, Director
217/782-0610

2200 Churchill Road, Springfield, IL 62794-9276

May 5, 1993

LARRY KOLLINS
NORWOOD MARKING SYSTEMS
2538 WISCONSIN AVENUE
DOWNERS GROVE, IL. 60515

Re: NORWOOD MARKING SYSTEMS - DOWNERS GROVE
NPDES Permit No. ILR000175
Notice of Coverage under General Permit

Dear NPDES Permittee:

We have reviewed your application and determined that storm water discharges associated with industrial activity (excluding construction sites) are appropriately covered by the attached General NPDES Permit issued by the Agency.

The permit as issued covers application requirements, a storm water pollution prevention plan, and reporting requirements. The storm water pollution prevention plan must be completed within 180 days of this notification of coverage and shall provide for compliance within 365 days of this notification of coverage.

Failure to meet any portion of the permit could result in civil and/or criminal penalties. The Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Permit is applied to your discharge effective on the date of this letter. You have the right to appeal the Agency's decision to cover your discharge by the General Permit to the Illinois Pollution Control Board within a 30 day period following the date of this letter.

This letter shows your facility permit number below your facility name. Please reference this number in all future correspondence. Should you have any questions concerning the Permit, please contact the Permit Section at 217/782-0610.

Very truly yours,

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:ANT:a

Enclosure

cc: Records Unit
Region 2

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NPDES Permit

Expiration Date: October 1, 1997

Issue Date: October 16, 1992

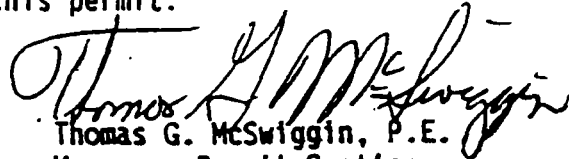
Discharges authorized by this General Permit: In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act, the following discharges may be authorized by this permit in accordance with the conditions herein:

Discharges of storm water associated with industrial activity, as defined and limited herein. Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

This general permit regulates only storm water discharges from a facility. Other discharges such as process wastewater or cooling water shall be regulated by other NPDES permits.

Receiving waters: Discharges may be authorized to any surface water of the State.

To receive authorization to discharge under this general permit, a facility operator must submit an application as described in the permit conditions to the Illinois Environmental Protection Agency. Authorization, if granted, will be by letter and include a copy of this permit.



Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

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A. APPLICABILITY OF THIS GENERAL PERMIT

This permit is applicable to new and existing storm water discharges associated with industrial activity in the State of Illinois from the facilities listed below.

1. Discharges of storm water from facilities whose process wastewater discharges are subject to new source performance standards or toxic pollutant effluent standards under 40 CFR Subchapter N, except:
 - a. discharges subject to new source performance standards or toxic pollutant effluent standards and described in paragraph A.8. below which do not have materials or activities exposed to storm water;
 - b. discharges subject to storm water effluent limitations guidelines listed in B.1. of this permit.
2. Discharges from manufacturing facilities in the following categories:
 - SIC 24 (Lumber and wood products except furniture) except SIC 2434 (Wood kitchen cabinets)
 - SIC 26 (Paper and allied products) except SIC 265 (Paperboard containers and boxes from purchased paperboard) and SIC 267 (Converted paper and paperboard products, except containers and boxes)
 - SIC 28 (Chemicals and allied products) except SIC 283 (Drugs)
 - SIC 29 (Petroleum refining and related industries), except discharges subject to 40 CFR 419
 - SIC 311 (Leather tanning and finishing)
 - SIC 32 (Stone, clay, glass, and concrete products) except SIC 323 (Glass products made of purchased glass)
 - SIC 33 (Primary metal industries)
 - SIC 3441 (Fabricated structural metal)
 - SIC 373 (Ship and boat building and repairing)
3. Facilities classified as SIC Codes 10-14 (Mineral Industry) including active or inactive mining operations and oil and gas exploration, production, processing, treatment operations, or transmission facilities, except discharges subject to 40 CFR 434, 436, or 440.
4. Landfills, land application sites (excluding land application sites which utilize agricultural land), and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described in 40 CFR 122.26(b)(14)).
5. Facilities involved in the recycling of materials including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards including but not limited to SIC 5015 (Used motor vehicle parts) and SIC 5093 (Scrap and waste materials)
6. Transportation facilities--portions of the following facilities involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations:
 - SIC 40 (Railroad transportation)
 - SIC 41 (Local and suburban transit and inter-urban highway passenger transportation)
 - SIC 42 (Motor freight transportation and warehousing) except SIC 4221-4225 (Farm product warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)
 - SIC 43 (United States Postal Service)
 - SIC 44 (Water transportation)
 - SIC 45 (Transportation by air)
 - SIC 5171 (Petroleum bulk stations and terminals-wholesale)

7. Treatment Works treating domestic sewage with a design flow of 1 MGD or more, or required to have an approved pretreatment program; includes sludge or wastewater treatment devices or systems used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, and land dedicated to sludge disposal located within the confines of the facility; excludes off-site sludge management lands, farm lands, and gardens.
8. Facilities in the following SIC Codes with storm water discharges from areas (except access roads and rail lines) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water.

SIC 20 (Food and kindred products manufacturing or processing)
 SIC 21 (Tobacco products)
 SIC 22 (Textile mill products)
 SIC 23 (Apparel and other finished products made from fabrics and similar materials)
 SIC 2434 (Wood kitchen cabinets)
 SIC 25 (Furniture and fixtures)
 SIC 265 (Paperboard containers and boxes)
 SIC 267 (Converted paper and paperboard products, except containers and boxes)
 SIC 27 (Printing, publishing, and allied industries)
 SIC 283 (Drugs)
 SIC 285 (Paints, varnishes, lacquers, enamels, and allied products)
 SIC 30 (Rubber and miscellaneous plastics products)
 SIC 31 (Leather and leather products) except SIC 311 (Leather tanning and finishing)
 SIC 323 (Glass products, made of purchased glass)
 SIC 34 (Fabricated metal products, except machinery and transportation equipment) except SIC 3441 (Fabricated structural metal)
 SIC 35 (Industrial and commercial machinery and computer equipment)
 SIC 36 (Electronic and other electrical equipment and components, except computer equipment)
 SIC 37 (Transportation equipment) except SIC 373 (Ship and boat building and repairing)
 SIC 38 (Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks)
 SIC 39 (Miscellaneous manufacturing industries)
 SIC 4221-25 (Farm products warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)

B. TYPES OF DISCHARGES NOT COVERED BY THIS PERMIT

This permit is not applicable to storm water discharges from the following facilities:

1. Discharges subject to storm water effluent limitations guidelines in the following categories:

Cement Manufacturing (40 CFR 411)
 Feedlots (40 CFR 412)
 Fertilizer Manufacturing (40 CFR 418)
 Petroleum Refining (40 CFR 419)
 Phosphate Manufacturing (40 CFR 422)
 Steam Electric (40 CFR 423)
 Coal Mining (40 CFR 434)
 Mineral Mining and Processing (40 CFR 436)
 Ore Mining and Dressing (40 CFR 440)
 Asphalt Emulsion (40 CFR 443)

2. Hazardous waste treatment, storage or disposal facilities.
3. Steam electric power generating facilities, including coal handling sites.
4. Construction activity including clearing, grading and excavation activities.
5. Storm water discharges associated with industrial activity from facilities with an existing NPDES individual or general permit for the storm water discharges.
6. Storm water discharges associated with industrial activity which are identified by the Agency as possibly causing or contributing to a violation of water quality standards.
7. Storm water discharges associated with inactive mining or inactive oil and gas operations occurring on Federal lands where an operator cannot be identified.
8. Storm water discharges that the Agency determines are not appropriately covered by this general permit.

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill, and does not supercede any reporting requirements for spills or releases of hazardous substances or oil.

C. APPLICATION REQUIREMENTS

1. Dischargers seeking coverage under this general permit shall provide the Illinois Environmental Protection Agency (IEPA) with the following information:
 - a. A completed IEPA Notice of Intent form, accompanied by quantitative sampling data for the storm water discharge(s) if available; or
 - b. A completed U.S. EPA Form 1, including Form 2F and quantitative sampling data if available; or
 - c. A completed U.S. EPA Notice of Intent form, accompanied by quantitative sampling data for the storm water discharge (s) if available.
 - d. Participation in a group application accepted by U.S. EPA shall also be considered as an application for coverage under this general permit, subject to the applicability provisions of this permit.
2. Quantitative sampling data as required by U.S. EPA Form 2F for storm water discharges from the following facilities is required to be submitted, unless the facility is a participant in a group application accepted by U.S. EPA. Applications submitted without sample results will be considered complete if sample results are submitted before April 1, 1993.
 - a. Facilities subject to reporting requirements under Section 313 of EPCRA for chemicals classified as "Section 313 water priority chemicals": Storm water discharges that come into contact with any equipment, tank, container, or other vessel or area used for storage of a Section 313 water priority chemical, or located at a truck or rail car unloading area where a Section 313 water priority chemical is handled.
 - b. Facilities classified as SIC 33 (Primary Metal Industries).
 - c. Active or inactive landfills, land application sites, or open dumps without a stabilized final cover which have received any industrial wastes.
 - d. Wood treatment facilities: Storm water discharges from areas that are used for wood treatment, wood surface application, or storage of treated or surface protected wood.
 - e. Coal pile runoff at industrial facilities other than coal mines.
 - f. Battery reclaiming facilities: storm water discharges from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation.
 - g. Airports with over 50,000 flight operations per year: storm water discharges from aircraft or airport deicing areas.
 - h. Meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils.
 - i. Facilities classified as SIC 28 (Chemicals and Allied Products) and SIC 30 (Rubber and Miscellaneous Plastics Products): Storm water discharges that come into contact with solid chemical storage piles.
 - j. Automobile junkyards: Storm water discharges exposed to over 250 auto/truck bodies with drivelines, over 250 drivelines, or any combination thereof (in whole or in parts); over 500 auto/truck units (bodies with or without drivelines in whole or in parts); or over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water.
 - k. Lime manufacturing facilities: storm water discharges that have come into contact with lime storage piles.
 - l. Cement manufacturing facilities and cement kilns: Storm water discharges other than those subject to 40 CFR 411.
 - m. Ready-mixed concrete facilities.
 - n. Ship building and repairing facilities.
3. When a facility has two or more outfalls that, based on consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may sample the effluent of one such outfall and report that quantitative data also applies to the substantially identical outfalls. If the applicant is requesting approval to sample a representative outfall, identification of all

storm water outfalls considered to be substantially identical along with the outfall being used to represent such outfalls and appropriate justification must be provided with the application.

4. For existing facilities with an individual NPDES permit covering storm water associated with industrial activity, or those facilities who have previously submitted an application for an individual permit and not yet received a permit, the permittee/applicant may elect to seek coverage under this general permit in place of obtaining an individual permit. To be considered for coverage the permittee/applicant is required to submit the above information following the general permit issue date.
5. For new facilities, the NOI and required information shall be submitted 180 days prior to the date on which the discharge is to commence unless permission for a later date has been granted by the IEPA. Mobile facilities (such as concrete or asphalt batch plants) shall apply at least 30 days prior to discharge.
6. For purposes of the permit an existing facility shall be considered a facility which discharged storm water associated with industrial activity prior to the application deadline set by the U.S. EPA storm water regulations. A new facility is a facility which generates storm water after, but not before the deadline.
7. The required information shall be submitted to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276
8. In any case where an NPDES Permit has been timely applied for but final administrative disposition of such application has not been made, it shall not be a violation of Section 12(F) of the Environmental Protection Act to discharge without such permit unless the complainant proves that final administrative disposition has not been made because of the failure of the applicant to furnish information reasonably required or requested in order to process the application. For purposes of this provision, participation in a group application filed with U.S. EPA shall be deemed an application filed with the Agency. This provision does not relieve the applicant from the responsibility for compliance with any other requirement of the Act or regulations promulgated under the Act.
9. Facilities which discharge storm water associated with industrial activity to a municipal separate storm sewer system shall notify the municipality, and shall provide the municipality with a copy of their application if requested.

D. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

1. A storm water pollution prevention plan shall be developed by the permittee for each facility covered by this permit. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.
2. The plan shall be completed within 180 days of notification by the Agency of coverage by this permit or in the case of new facilities, prior to submitting an NOI to be covered under this permit. Plans shall provide for compliance with the terms of the plan within 365 days of notification by the Agency of coverage by this permit, or in the case of new facilities, prior to submitting an NOI to be covered under this permit. The owner or operator of a facility with storm water discharges covered by this permit shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.
3. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this permit. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
4. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph 0.8. of this permit indicates that an amendment is needed. The plan should also be amended if the discharger is

in violation of any conditions of this permit, or has not achieved the general objectives of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, and shall be provided to the Agency for review upon request.

5. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from the facility. The plan shall include, at a minimum, the following items:

- a. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.
- b. A site map showing:
 - i. The storm water conveyance and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point;
 - iii. Paved areas and buildings;
 - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
 - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
 - vi. Surface water locations and/or municipal storm drain locations
 - vii. Areas of existing and potential soil erosion;
 - viii. Vehicle service areas;
 - ix. Material loading, unloading, and access areas.
- c. A narrative description of the following:
 - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
 - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges; - oil day
 - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges; - unloading, dock PARTIALLY COVERED (material handled)
 - iv. Industrial storm water discharge treatment facilities;
 - v. Methods of onsite storage and disposal of significant materials; - stored inside and covered on as needed basis not to exceed a certain time period.
- d. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. - oil
- e. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
- f. A summary of existing sampling data describing pollutants in storm water discharges.

6. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:

- (a) Storm Water Pollution Prevention Personnel - ^{SEE PREVIOUS} identification by job titles of the ^{full time} individuals who are responsible for developing, implementing, and revising the plan. ^{specific}
- (b) Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.

- c. **Good Housekeeping** - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
- d. **Spill Prevention and Response** - ^{maybe the containing also} Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
- e. **Storm Water Management Practices** - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. ^{Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:}
- i. **Containment** - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff;
 - ii. **Oil & Grease Separation** - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges;
 - iii. **Debris & Sediment Control** - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges;
 - iv. **Waste Chemical Disposal** - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges. ^{used oils picked up & disposed of}
 - v. **Storm Water Diversion** - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination; ^{asphalt sloping away from building}
 - vi. **Covered Storage or Manufacturing Areas** - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water. ^{process area is building & surrounding docks}
 - f. **Sediment and Erosion Prevention** - The plan shall identify areas which ^{due to topography,} activities, or other factors, have a high potential for significant soil erosion and describe measures to limit erosion. ^{area partially covered}
 - g. **Employee Training** - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
 - h. **Inspection Procedures** - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
7. **Non-Storm water Discharges** - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include a description of any tests for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible. Discharges not comprised entirely of storm water are not authorized by this permit.
8. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
9. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.
10. The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim portions of the plan as confidential business information, including any portion describing facility security measures.

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11. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
12. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirements imposed by the operator of the municipal system.

E. CONSTRUCTION AUTHORIZATION

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

1. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee thereupon waives all rights thereunder.
2. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
3. Plans and specifications of all treatment equipment being included as a part of the stormwater management practice shall be included in the SWPPP.
4. Any modification of or deviation from the plans and specifications originally submitted with the initial SWPPP requires amendment of the SWPPP.
5. Construction activities which result from treatment equipment installation, including cleaning, grading and excavation activities which result in the disturbance of five acres or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding required permit(s).

F. REPORTING

1. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part 8 of the Storm Water Pollution Prevention Plan of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s).
2. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
3. Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
Annual Inspection Report
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276
4. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

G. TERMINATION OF COVERAGE UNDER THIS PERMIT

1. Where all storm water discharges associated with industrial activity that have been authorized by this permit are eliminated, the operator of the facility may submit a termination request to the Agency at the address shown on Page 5 of this permit. The termination request shall include the name, address, telephone number, and location of the facility, and a description of actions taken to eliminate the storm water discharge or other justification for the request. Coverage under this permit is not terminated until the Agency acts on the termination request, and reports as described above are required until coverage is terminated.

2. The Agency may require any person authorized by this permit to apply for and obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. The Agency may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. The Agency may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application required by the Agency under this paragraph then the applicability of this permit to the individual NPDES permitted is automatically terminated at the end of the day specified for application submittal.
3. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request, in accordance with the requirements of 40 CFR 122.28, to the Agency. The request shall be granted by issuing of an individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.
4. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the issue date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied coverage under an alternative NPDES general permit the applicability of this permit to the individual NPDES permitted is automatically terminated on the date of such denial, unless otherwise specified by the Agency.

H. RENEWAL

1. Application forms for renewal procedures, including coverage under this general permit, will be available approximately one year prior to the expiration date.
2. Any Permittee who wishes to continue to discharge after the expiration date of this general permit shall apply for reissuance of the permit not less than 180 days prior to the expiration date of this permit.

I. DEFINITIONS

1. Coal pile runoff means the rainfall runoff from or through any coal storage pile.
2. Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.
3. Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well or waste pile.
4. Section 313 water priority chemical means a chemical or chemical categories which: 1) Are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) Are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.
5. Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
6. Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

Note that additional definitions are included in the permit Standard Conditions, Attachment H.

- e. Storm water discharges that the Agency, at its discretion, determines are not appropriately authorized or controlled by this general permit.

C. Authorization.

1. In order for storm water discharges from construction sites to be authorized to discharge under this general permit a discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part II below, using an NOI from provided by the Agency, or be covered by a valid Illinois General NPDES Construction Site Activities Permit.
2. Where a new operator (contractor) is selected after the submittal of an NOI under Part II below, a new Notice of Intent (NOI) must be submitted by the owner in accordance with Part II.
3. For projects that have complied with State law on historic preservation and endangered species prior to submittal of the NOI, through coordination with the Illinois Historic Preservation Agency and the Illinois Department of Natural Resources or through fulfillment of the terms of interagency agreements with those agencies, the NOI shall indicate that such compliance has occurred.

Unless notified by the Agency to the contrary, dischargers who submit an NOI in accordance with the requirements of this permit are authorized to discharge storm water from construction sites under the terms and conditions of this permit either:

- a. 48 hours after the date the NOI is postmarked, if the project had established compliance with Illinois law regarding historic preservation and endangered species prior to submittal of the NOI;
or
- b. 30 days after the date the NOI is postmarked, if the project had not established compliance with Illinois historic preservation and endangered species requirements prior to submittal of the NOI.

The Agency may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification.

1. To receive authorization under this general permit, a discharge must either be covered by a valid Illinois General NPDES Construction Site Permit, or a Notice of Intent (NOI) in accordance with the requirements of this part must be submitted prior to the commencement of construction. For projects that have established compliance with Illinois law regarding historic preservation and endangered species prior to submittal of the NOI, the NOI must be submitted at least 48 hours prior to the commencement of construction. For all other projects, the NOI must be submitted at least 30 days prior to the commencement of construction.
2. Discharges that are covered by a valid Illinois General NPDES Construction Site Activities Permit are automatically covered by this permit.
3. A discharger may submit an NOI in accordance with the requirements of this part after the start of construction. In such instances, the Agency may bring an enforcement action for any discharges of storm water associated with industrial activity from a construction site that have occurred on or after the start of construction.

- B. Failure to Notify.** Dischargers who fail to notify the Agency of their intent to be covered, and discharge storm water associated with construction site activity to Waters of the State without an NPDES permit, are in violation of the Environmental Protection Act and Clean Water Act.

- C. Contents of Notice of Intent.** The Notice of Intent shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit by all of the entities identified in paragraph 2 below and shall include the following information:

1. The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section (if the section, township and range is provided) that the construction site is located in;
2. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity.
3. The name, address and telephone number of the general contractor(s) that have been identified at the time of the NOI submittal;
4. The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water(s);
5. The number of any NPDES permit for any discharge (including non-storm water discharges) from the site that is currently authorized by an NPDES permit.
6. A yes or no indication of whether the owner or operator has existing quantitative data which describes the concentration of pollutants in storm water discharges (existing data should not be included as part of the NOI); and
7. A brief description of the project, estimated timetable for major activities, estimates of the number of acres of the site on which soil will be disturbed, and a certification that a storm water pollution prevention plan has been prepared for the facility in accordance with Part IV of this permit, and such plan provides compliance with local sediment and erosion plans or permits and/or storm water management plans or permits in accordance with paragraph VI.G.1 (Signatory Requirements) of this permit. (A copy of the plans or permits should not be included with the NOI submission).

NPDES Permit No. ILR10

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

CONSTRUCTION SITE ACTIVITIES

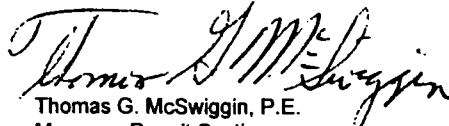
NATIONAL POLLUTANT DISCHARGE ELIMINATIO *CONSTRUCTION* (NPDES) Storm Water Permit

Expiration Date: May 31, 2003

Issue Date: May

Effective Date: June 1, 1998

In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder the following discharges are authorized by this permit, in accordance with the conditions and attachments herein:


Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

Part I. COVERAGE UNDER THIS PERMIT

A. **Permit Area.** The permit covers all areas of the State of Illinois with discharges to any waters of the State.

B. **Eligibility.**

1. This permit shall authorize all discharges of storm water associated with industrial activity from construction sites, (those sites or common plans of development or sale that will result in the disturbance of five or more acres total land area), (heretofore referred to as storm water discharges from construction activities) occurring after the effective date of this permit (including discharges occurring after the effective date of this permit where the construction activity was initiated before the effective date of this permit), except for discharges identified under paragraph 1.B.3 (Limitations on Coverage).
2. This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
 - a. the industrial source other than construction is located on the same site as the construction activity;
 - b. storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 - c. storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants and dedicated concrete plants) are covered by a different NPDES general permit or individual permit authorizing such discharges.
3. **Limitations on Coverage.** The following storm water discharges from construction sites are not authorized by this permit:
 - a. storm water discharges associated with industrial activity that originate from the site after construction activities have been completed and the site has undergone final stabilization.
 - b. discharges that are mixed with sources of non-storm water other than discharges identified in Part III.A (Prohibition on Non-Storm Water Discharges) of this permit and in compliance with paragraph IV.D.5 (Non-Storm Water Discharges) of this permit.
 - c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit or which are issued a permit in accordance with Part VI.N (Requiring an Individual Permit or an Alternative General Permit) of this permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges; and
 - d. storm water discharges from construction sites that the Agency has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with construction site activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction site activity and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance.

The plan shall:

1. Be completed prior to the start of the construction to be covered under this permit and updated as appropriate;
2. Provide for compliance with the terms and schedule of the plan beginning with the initiation of construction activities.

B. Signature and Plan Review.

1. The plan shall be signed in accordance with Part VI.G (Signatory Requirements), and be retained on-site at the facility which generates the storm water discharge in accordance with Part VI.E (Duty to Provide Information) of this permit.
2. The permittee shall make plans available upon request from this Agency or a local agency approving sediment and erosion plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.
3. The Agency may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan requires modifications in order to meet the minimum requirements of this part. Within 7 days from receipt of notification from the Agency, the permittee shall make the required changes to the plan and shall submit to the Agency a written certification that the requested changes have been made. Failure to comply shall terminate authorization under this permit.
4. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the CWA. The permittee shall make plans available to members of the public upon request by the public. However, the permittee may claim any portion of a storm water pollution prevention plan as confidential in accordance with 40 CFR Part 2.

C. Keeping Plans Current. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the Waters of the State and which has not otherwise been addressed in the plan or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under paragraph D.2 below, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the storm water pollution prevention plan. Amendments to the plan may be reviewed by the Agency in the same manner as Part IV.B above.

D. Contents of Plan. The storm water pollution prevention plan shall include the following items:

1. **Site Description.** Each plan shall, provide a description of the following:
 - a. A description of the nature of the construction activity;
 - b. A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading);
 - c. Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities;
 - d. An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;
 - e. A site map indicating drainage patterns and approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking, areas of soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and
 - f. The name of the receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site.
2. **Controls.** Each plan shall include a description of appropriate controls that will be implemented at the construction site. The plan will clearly describe for each major activity identified in paragraph D.1 above, appropriate controls and the timing during the construction process that the controls will be implemented. (For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed after final stabilization). The description of controls shall address as appropriate the following minimum components:
 - a. **Erosion and Sediment Controls.**

D. Where to Submit.

1. Facilities which discharge storm water associated with construction site activity must use a NOI form provided by the Agency. NOIs must be signed in accordance with Part VI.G (Signatory Requirements) of this permit. NOIs are to be submitted certified mail to the Agency at the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 Attention: Permit Section
 1021 North Grand East
 Post Office Box 19276
 Springfield, Illinois 62794-9276

2. A copy of the letter of notification of coverage or other indication that storm water discharges from the site are covered under an NPDES permit shall be posted at the site in a prominent place for public viewing (such as alongside a building permit).

E. Additional Notification. Facilities which are operating under approved local sediment and erosion plans, grading plans, or storm water management plans, in addition to filing copies of the Notice of Intent in accordance with Part D above, shall also submit signed copies of the Notice of Intent to the local agency approving such plans in accordance with the deadlines in Part A above. See Part IV.D.2.d (Approved State or Local Plans).

F. Notice of Termination. Where a site has been finally stabilized and all storm water discharges from construction sites that are authorized by this permit are eliminated, the permittee of the facility may submit a Notice of Termination that is signed in accordance with Part VI.G (Signatory Requirements) of this permit.

1. The Notice of Termination shall include the following information:

- a. The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section (if the section, township and range is provided) that the construction site is located in;
- b. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity.
- c. The name, address and telephone number of the general contractor(s);
- d. The following certification signed in accordance with Part VI.G (Signatory Requirements) of this permit:

"I certify under penalty of law that all storm water discharges associated with construction site activity from the identified facility that are authorized by NPDES general permit ILR100000 have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with construction site activity by the general permit, and that discharging pollutants in storm water associated with construction site activity to Waters of the State is unlawful under the Environmental Protection Act and Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act."

For the purposes of this certification, elimination of storm water discharges associated with industrial activity means that all disturbed soils at the identified facility have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have otherwise been eliminated.

2. All Notices of Termination are to be sent, using the form provided by the Agency to the address in paragraph II.D.1.

**Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER
 NON-NUMERIC LIMITATIONS**

A. Prohibition on Non-Storm Water Discharges.

1. Except as provided in paragraph I.B.2 and 2 below, all discharges covered by this permit shall be composed entirely of storm water.
2.
 - a. Except as provided in paragraph b below, discharges of materials other than storm water must be in compliance with a NPDES permit (other than this permit) issued for the discharge.
 - b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharges is in compliance with paragraph IV.D.5 (Non-Storm Water Discharges): discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles or control dust; potable water sources including waterline flushings; irrigation drainages; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

- (i). **Stabilization Practices.** A description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the plan. Except as provided in paragraphs (A) and (B) below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.
 - (A). Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (B). Where construction activity will resume on a portion of the site within 21 days from when activities ceased, (e.g. the total time period that construction activity is temporarily ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of site by the 14th day after construction activity temporarily ceased.
 - (ii). **Structural Practices.** A description of structural practices to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.
- b. **Storm Water Management.** A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Permittees are responsible for only the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with industrial activity have been eliminated from the site.
- (i). Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). The pollution prevention plan shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed predevelopment levels.
 - (ii). Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).
- c. **Other Controls.**
- (i). **Waste Disposal.** No solid materials, including building materials, shall be discharged to Waters of the State, except as authorized by a Section 404 permit.
 - (ii). The plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
- d. **Approved State or Local Plans.**
- (i). The management practices, controls and other provisions contained in the storm water pollution prevention plan must be at least as protective as the requirements contained in Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Facilities which discharge storm water associated with construction site activities must include in their storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials. Requirements specified in sediment and erosion site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit even if they are not specifically included in a storm water pollution prevention plan required under this permit. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.
 - (ii). Dischargers seeking alternative permit requirements are not authorized by this permit and shall submit an individual permit application in accordance with 40 CFR 122.26 at the address indicated in Part II.D (Where to Submit) of this permit, along with a description of why requirements in approved local plans or permits should not be applicable as a condition of an NPDES permit.
3. **Maintenance.** A description of procedures to maintain in good and effective operating conditions vegetation, erosion and sediment control measures and other protective measures identified in the site plan.
4. **Inspections.** Qualified personnel (provided by the permittee) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.1 (Site Description) of this permit and pollution prevention measures identified in the plan in accordance with paragraph IV.D.2 (Controls) of this permit shall be revised as appropriate as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the plan within 7 calendar days following the inspection.
- c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph b above shall be made and retained as part of the storm water pollution prevention plan for at least three years after the date of inspection. The report shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit.
- d. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during an inspection conducted, including those not required by the Plan. Submission shall be on forms provided by the Agency and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance.
- e. All reports of noncompliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements).
- f. All reports of noncompliance shall be mailed to the Agency at the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 Compliance Assurance Section
 1021 North Grand East
 Post Office Box 19276
 Springfield, Illinois 62794-9276

- 5. **Non-Storm Water Discharges** - Except for flows from fire fighting activities, sources of non-storm water listed in paragraph III.A.2 of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and insure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- E. **Additional requirements for storm water discharge from industrial activities other than construction, including dedicated asphalt plants, and dedicated concrete plants.** - This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
 - 1. the industrial source other than construction is located on the same site as the construction activity;
 - 2. storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 - 3. storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants (other than asphalt emulsion facilities) and dedicated concrete plants) are in compliance with the terms, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.
- F. **Contractors.**
 - 1. The storm water pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in paragraph 2 below in accordance with Part VI.G (Signatory Requirements) of this permit. All certifications must be included in the storm water pollution prevention plan except for owners that are acting as contractor.
 - 2. **Certification Statement.** All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with paragraph 1 above shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR100000) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature in accordance with Part VI.G of this permit; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

Part V. RETENTION OF RECORDS

- A. The permittee shall retain copies of storm water pollution prevention plans and all reports and notices required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized. This period may be extended by request of the Agency at any time.

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- a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.1 (Site Description) of this permit and pollution prevention measures identified in the plan in accordance with paragraph IV.D.2 (Controls) of this permit shall be revised as appropriate as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the plan within 7 calendar days following the inspection.
- c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph b above shall be made and retained as part of the storm water pollution prevention plan for at least three years after the date of inspection. The report shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit.
- d. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during an inspection conducted, including those not required by the Plan. Submission shall be on forms provided by the Agency and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance.
- e. All reports of noncompliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements).
- f. All reports of noncompliance shall be mailed to the Agency at the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 Compliance Assurance Section
 1021 North Grand East
 Post Office Box 19276
 Springfield, Illinois 62794-9276

5. **Non-Storm Water Discharges** - Except for flows from fire fighting activities, sources of non-storm water listed in paragraph III.A.2 of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and insure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- E. Additional requirements for storm water discharge from industrial activities other than construction, including dedicated asphalt plants, and dedicated concrete plants.** - This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
1. the industrial source other than construction is located on the same site as the construction activity;
 2. storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 3. storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants (other than asphalt emulsion facilities) and dedicated concrete plants) are in compliance with the terms, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.

F. Contractors.

1. The storm water pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in paragraph 2 below in accordance with Part VI.G (Signatory Requirements) of this permit. All certifications must be included in the storm water pollution prevention plan except for owners that are acting as contractor.
2. **Certification Statement.** All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with paragraph 1 above shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR100000) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature in accordance with Part VI.G of this permit; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

Part V. RETENTION OF RECORDS

- A. The permittee shall retain copies of storm water pollution prevention plans and all reports and notices required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized. This period may be extended by request of the Agency at any time.

- B. The permittee shall retain a copy of the storm water pollution prevention plan required by this permit at the construction site from the date of project initiation to the date of final stabilization.

Part VI. STANDARD PERMIT CONDITIONS

A. Duty to Comply.

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Illinois Environmental Protection Act and the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
2. Penalties for Violations of Permit Conditions.
 - a. Criminal
 - (1). Negligent Violations The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 years, or both. The Environmental Protection Act provides that any person who negligently violates subsection (f) of Section 12 of the Act, any provision of any regulation, standard, or filing requirement under subsection (b) of Section 39 of the Act, or any NPDES permit issued under the Act is subject to a fine not to exceed \$10,000 for each day of violation.
 - (2). Knowing Violations The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 year, or both. The Environmental Protection Act provides that any person who knowingly violates subsection (f) of Section 12 of the Act, any provision of any regulation, standard, or filing requirement under subsection (b) of Section 39 of the Act, or any NPDES permit issued under the Act commits a Class 4 felony, and in addition to any other penalty prescribed by law is subject to a fine not to exceed \$25,000 for each day of violation.
 - (3). Knowing Endangerment The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.
 - (4). False Statement The CWA provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction of a permittee is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309.c.4 of the Clean Water Act). The Environmental Protection Act provides that any person who knowingly makes any false statement, representation, or certification in an application form, or form pertaining to a NPDES permit or who knowingly renders inaccurate any monitoring device or record required in connection with any such permit or with any discharge which is subject to the provisions of subsection (f) of Section 12 of the Act commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
 - b. Civil Penalties - The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Environmental Protection Act provides that any person who violates subsection (f) of Section 12 of the Act, any provision of any regulation, standard, or filing requirement under subsection (b) of Section 39 of the Act, or any NPDES permit issued under the Act is subject to a civil penalty not to exceed \$50,000 for each violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues.
 - c. Administrative Penalties - The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:
 - (1). Class I penalty Not to exceed \$10,000 per violation nor shall the maximum amount exceed \$25,000.
 - (2). Class II penalty Not to exceed \$10,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$125,000.
- B. Continuation of the Expired General Permit. This permit expires five years from the date of issuance. An expired general permit continues in force and effect until a new general permit or an individual permit is issued. Only those facilities authorized to discharge under the expiring general permit are covered by the continued permit.
- C. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Duty to Provide Information. The permittee shall furnish within a reasonable time to the Agency or local agency approving sediment and erosion plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, any information which is requested to determine compliance with this permit. Upon request, the permittee shall also furnish to the Agency or local agency approving sediment and erosion

plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, copies of records required to be kept by this permit.

- F. **Other Information.** When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Agency, he or she shall promptly submit such facts or information.
- G. **Signatory Requirements.** All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the Agency or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed.
1. All Notices of Intent shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
 2. All reports required by the permit and other information requested by the Agency shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Agency.
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
 - c. **Changes to authorization.** If an authorization under paragraph I.C (Authorization) is no longer accurate because a different individual or position has responsibility for the overall operation of the construction site, a new authorization satisfying the requirements of paragraph I.C must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
 - d. **Certification.** Any person signing documents under this Part shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- H. **Penalties for Falsification of Reports.** Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. Section 44(j)(4) and (5) of the Environmental Protection Act provides that any person who knowingly makes any false statement, representation, or certification in an application form, or form pertaining to a NPDES permit commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- I. **Penalties for Falsification of Monitoring Systems.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the CWA. The Environmental Protection Act provides that any person who knowingly renders inaccurate any monitoring device or record required in connection with any NPDES permit or with any discharge which is subject to the provisions of subsection (f) of Section 12 of the Act commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- J. **Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA.
- K. **Property Rights.** The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- L. **Severability.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
- M. **Transfers.** This permit is not transferable to any person except after notice to the Agency. The Agency may require the discharger to apply for and obtain an individual NPDES permit as stated in Part I.C (Authorization).

N. Requiring an Individual Permit or an Alternative General Permit.

1. The Agency may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. Where the Agency requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the Agency shall notify the discharger in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Applications shall be submitted to the Agency indicated in Part II.D (Where to Submit) of this permit. The Agency may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the Agency under this paragraph, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified by the Agency for application submittal.
2. Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the Agency at the address indicated in Part II.D (Where to Submit) of this permit. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.
3. When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to a discharger otherwise subject to this permit, or the discharger is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee remains in effect, unless otherwise specified by the Agency.

O. State/Environmental Laws. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

P. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

Q. Inspection and Entry. The permittee shall allow the Agency or, in the case of a construction site which discharges through a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

R. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Part VII. REOPENER CLAUSE

- A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the discharger may be required to obtain individual permit or an alternative general permit in accordance with Part I.C (Authorization) of this permit or the permit may be modified to include different limitations and/or requirements.
- B. Permit modification or revocation will be conducted according to provisions of 35 Ill. Adm. Code, Subtitle C, Chapter I and the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5.

Part VIII. DEFINITIONS

"Agency" means the Illinois Environmental Protection Agency.

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Commencement of Construction" - The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.)

"Dedicated portable asphalt plant" - A portable asphalt plant that is located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject

to the asphalt emulsion effluent limitation guideline at 40 CFR 443.

"Dedicated portable concrete plant" - A portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

"Dedicated sand or gravel operation" - An operation that produces sand and/or gravel for a single construction project.

"Director" means the Director of the Illinois Environmental Protection Agency or an authorized representative.

"Final Stabilization" means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% the cover for unpaved areas and areas not covered by permanent structures has been established or equivalent stabilization measures (such as the use of riprap, gabions or geotextiles) have been employed.

"Large and Medium municipal separate storm sewer system" means all municipal separate storm sewers that are either:

- (i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or
- (ii) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or
- (iii) owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

"NOI" means notice of intent to be covered by this permit (see Part II of this permit.)

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Associated with Industrial Activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)-(xi)) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

- (i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph);
- (ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28, 29, 311, 32, 33, 3441, 373;
- (iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(l)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;
- (iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;
- (v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;
- (vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
- (vii) Steam electric power generating facilities, including coal handling sites;

- (viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42, 44, and 45 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under subparagraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;
- (ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;
- (x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than five acres of total land area which are not part of a larger common plan of development or sale;
- (xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (i)-(x)).

"Waters" mean all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable.

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF INTENT (NOI)**

**FOR
GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH INDUSTRIAL ACTIVITY
(EXCLUDING CONSTRUCTION ACTIVITY)**

IMPORTANT: FORM MUST BE TYPED TO ENABLE AUTOMATED OPTICAL PROCESSING.

← PLEASE CHECK TYPEWRITER ALIGNMENT - LEFT AND RIGHT →

OWNER/OPERATOR INFORMATION

NAME: Norwood Marking Systems		OWNER TYPE: (SELECT ONE AND TYPE "X")	
MAILING ADDRESS: 2538 Wisconsin Avenue		<input checked="" type="checkbox"/> PRIVATE	<input type="checkbox"/> COUNTY <input type="checkbox"/> STATE
CITY: Downers Grove	ST: IL ZIP: 60515	<input type="checkbox"/> CITY	<input type="checkbox"/> SPECIAL DISTRICT
CONTACT PERSON: Mr. Larry Collins		<input type="checkbox"/> FEDERAL	
TELEPHONE NUMBER:		AREA CODE	NUMBER
		708	968-0646

FACILITY/SITE INFORMATION

SELECT ONE AND TYPE "X"	<input checked="" type="checkbox"/> EXISTING FACILITY	<input type="checkbox"/> NEW FACILITY	<input type="checkbox"/> CHANGE OF INFORMATION	GENERAL NPDES PERMIT NO.: ILR00
FACILITY NAME: Norwood Marking Systems		OTHER NPDES PERMIT NUMBERS: (IF APPLICABLE)		
MAILING ADDRESS: 2538 Wisconsin Avenue		TELEPHONE NUMBER:	AREA CODE	NUMBER
			708	968-0646
CITY: Downers Grove	ST: IL ZIP: 60515	LATITUDE: (NEAREST 15 SECONDS)	DEG. MIN. SEC.	LONGITUDE: (NEAREST 15 SECONDS)
		41	47 22	88 02 49
COUNTY: DuPage	SECTION: 12	TOWNSHIP: 38 North	RANGE: 10 East	
SIC OR DESIGNATED ACTIVITY CODE(S):	PRIMARY	2ND	3RD	4TH
	3565			

RECEIVING WATER INFORMATION

DOES YOUR STORM WATER DISCHARGE DIRECTLY TO: (SELECT ONE AND TYPE "X")	
<input checked="" type="checkbox"/> WATERS OF THE STATE	OR <input type="checkbox"/> STORM SEWER
NAME OF CLOSEST RECEIVING WATER (IF KNOWN): St. Joseph Creek	OWNER OF STORM SEWER SYSTEM:
DOES QUANTITATIVE DATA CURRENTLY EXIST WHICH DESCRIBES THE CONCENTRATION OF POLLUTANTS IN THE STORM WATER DISCHARGES?	
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan, will be complied with. I also certify that, to the best of my knowledge, the storm water which is discharged from this facility/site does not contain process wastewater, domestic wastewater, or cooling water.

APPLICANT SIGNATURE: Larry Collins **TITLE:** Plant Sup **DATE:** 9/29/92

MAIL COMPLETED FORM TO:
(DO NOT SUBMIT ADDITIONAL DOCUMENTATION UNLESS REQUESTED)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
ATTN: PERMIT SECTION
2200 CHURCHILL ROAD
POST OFFICE BOX 19278
SPRINGFIELD, IL 62794-9278

FOR OFFICE USE ONLY

LOG	
PERMIT	ILR00
DATE	

This Agency is authorized to require this information under Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1006. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Please print or type in the unshaded areas only

Form
2F
NPDES



United States Environmental Protection Agency
Washington, DC 20460

Application for Permit To Discharge Stormwater Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

[illegible]

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. No

[illegible]

B You may attach additional sheets describing any additional water pollution (or other environmental) projects which may affect your discharges you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
01	30,870 square feet	31,770 square feet			
02	31,050 square feet	31,770 square feet			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

1. A dust collection baghouse used to collect particulate emissions generated by interior graphite engraving and grinding processes is located along the north side of the building.
2. Fifty-five gallon drums containing a variety of scrap metal were formerly stored in a caged area near the northeast corner of the building which was exposed to storm water. The caged area was disassembled in 1992 and drums are no longer stored outside the building.
3. Standard lawn chemicals are applied to landscaped areas by a local lawn care service company.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
01	None	4-A
02	None	4-A

V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2F application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
PLANT SUP	Larry Hallin	9/28/92

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Site inspection revealed that all discharge conveyances are aboveground. These conveyances were evaluated by visual inspection.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No knowledge of any significant leaks or spills during past three years.

Continued from Page 2

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.

Tables VII-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E: Potential discharges not covered by analysis - Is any pollutant listed in Table 2F-2 a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☒ Yes (list all such pollutants below)☐ No (go to Section IX)

1. Aluminum
2. Iron
3. Various lubricating oils. (specific chemical constituents vary.)

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such pollutants below)☒ No (go to Section IX)**IX. Contract Analysis Information**

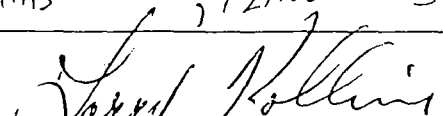
Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)☐ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Mostardi-Platt Associates, Inc.	945 Oaklawn Avenue Elmhurst, Illinois 60126	(708) 993-9000	A11

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (type or print)	B. Area Code and Phone No.
Larry Collins ; PLTW SOP.	708-965-0644
C. Signature	D. Date Signed
	9/28/92

Part A- You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (Include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	< 2 ppm				1	
Biological Oxygen Demand (BOD5)	< 10 ppm				1	
Chemical Oxygen Demand (COD)	10 ppm				1	
Total Suspended Solids (TSS)	62 ppm				1	
Total Kjeldahl Nitrogen	0.7 ppm				1	
Nitrate plus Nitrite Nitrogen	0.2 ppm				1	
Total Phosphorus	0.21 ppm				1	

pH	Minimum	6.3	Maximum	7	Minimum	Maximum
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Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

[illegible]

Part C - List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)	7. Season sample was taken	8. Form of Precipitation (rainfall, snowmelt)
09/14/92	55	0.70	Approximately 108 hours	224 gallons/a minute	12,320 gallons	Summer	Rainfall

9. Provide a description of the method of flow measurement or estimate.

Rational Method used to estimate flow rate based on calculated areas of pervious and impervious surfaces and rain gauge measurements.

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	< 2 ppm					
Biological Oxygen Demand (BOD5)	5 ppm					
Chemical Oxygen Demand (COD)	< 10 ppm					
Total Suspended Solids (TSS)	13 ppm					
Total Kjeldahl Nitrogen	0.56 ppm					
Nitrate plus Nitrite Nitrogen	0.4 ppm					
Total Phosphorus	0.2 ppm					

pH	Minimum	6.3	Maximum	Minimum	Maximum
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Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

[illegible]

Part C - List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

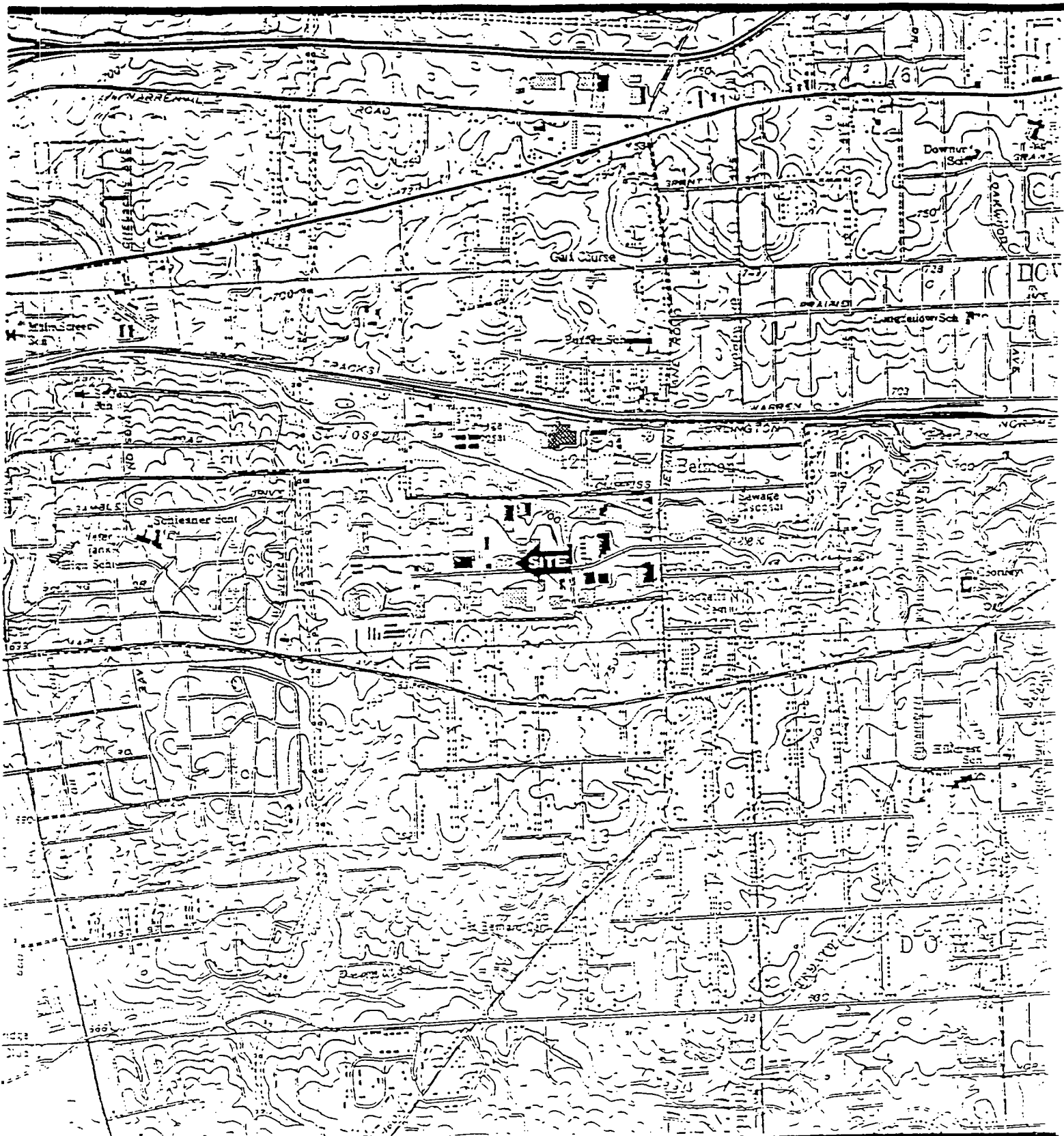
Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)	7. Season sample was taken	8. Form of Precipitation (rainfall, snowmelt)
09/14/92	55	0.70	Approximately 108 hours	225 gallons/minute	12,375 gallons	Summer	Rainfall

9. Provide a description of the method of flow measurement or estimate.

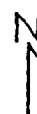
Rational Method used to estimate flow rate based on calculated areas of previous and impervious surfaces and rain gauge measurements.

NORWOOD MARKING SYSTEMS
2538 WISCONSIN AVENUE
DOWNERS GROVE, ILLINOIS



United States Geological Survey
Topographic Map
Wheaton Quadrangle
Illinois - DuPage County

Contour Interval: 10 feet
Map Date: 1962
Photo Revised: 1972 and 1980



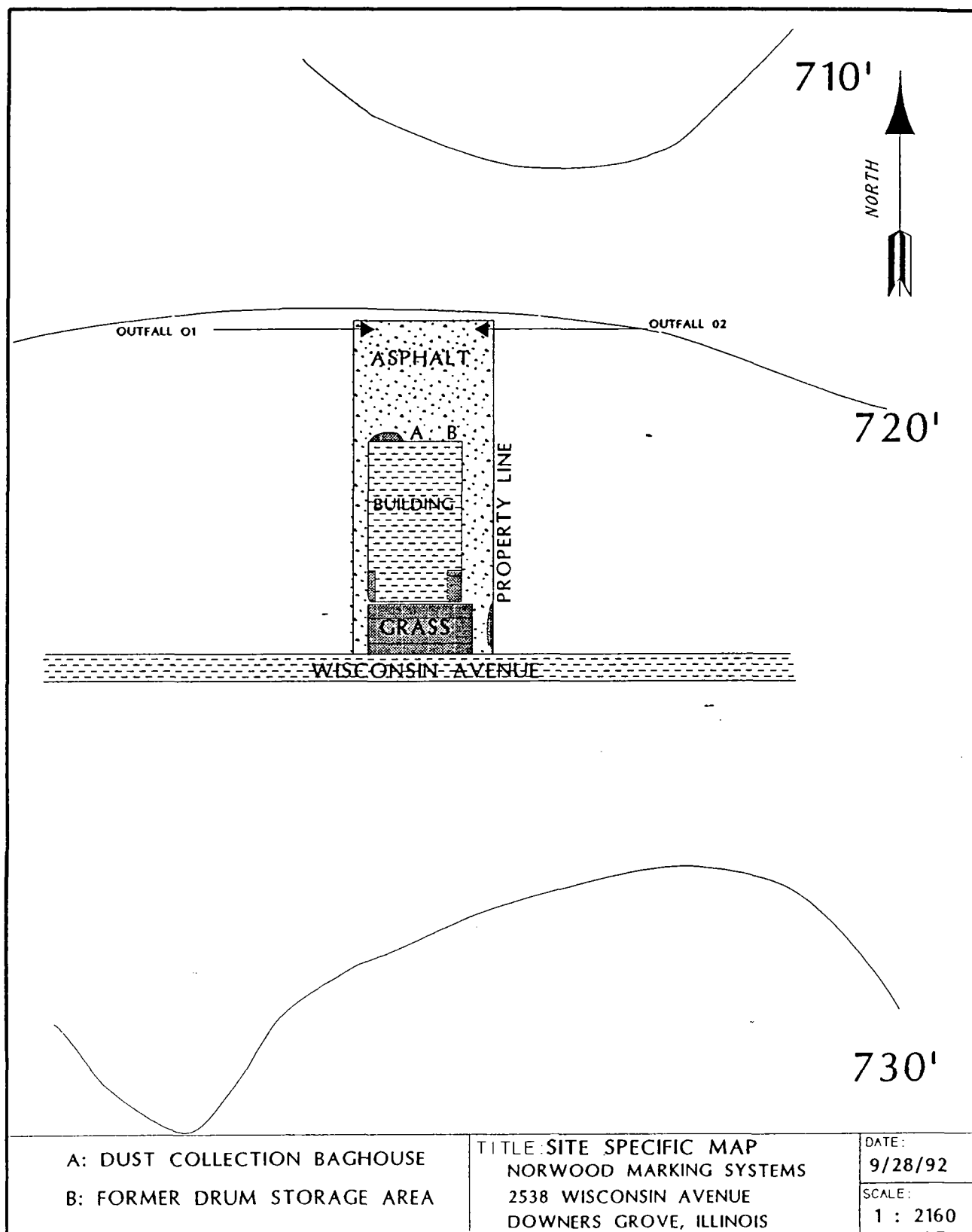


Exhibit F

Waste Analyses



1380 Busch Parkway • Buffalo Grove, Illinois 60089

(708) 808-7766 FAX (708) 808-7772

Mostard-Platt Associates, Inc.
945 Oaklawn Ave.
Elmhurst, IL 60126
Attention: Cheryl Smith

Client Project ID: 32508
Sample Descript: TCLP Extract
Lab Number: 308-1000

Sampled: Jun 22, 1993
Received: Jun 23, 1993
Analyzed: Jun 28-30, 1993
Reported: Jun 30, 1993

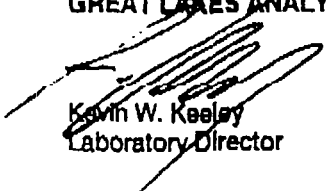
TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP): METALS

Analyte	Detection Limit mg/L (ppm)	Sample Results mg/L (ppm)
Arsenic.....	0.50	N.D.
Barium.....	10	N.D.
Cadmium.....	0.10	N.D.
Chromium.....	0.50	N.D.
Lead.....	0.50	N.D.
Mercury.....	0.02	N.D.
Selenium.....	0.10	N.D.
Silver.....	0.50	N.D.

*sludge from
settling tank*

Analytes reported as N.D. were not present above the stated limit of detection.

GREAT LAKES ANALYTICAL


Kevin W. Keesley
Laboratory Director

3081000.MOS <1>

MOSTARDI-PLATT ASSOCIATES, INC.
SAMPLING ANALYSIS REQUEST

Part I: FIELD SECTION

Collector: MTA Client Date Sampled: 8/23/22 Time: _____ hours

MOSTARDI-PLATT ASSOCIATES, INC.
 945 Oaklawn Avenue, Elmhurst, Illinois 60126
 Telephone: (708) 993-9000
 Fax: (708) 993-9017

Company Contact: Cheryl Smith

Laboratory Sample Number	Collector's Sample Number	Type of Sample*	Field Information**
3061000	32508 - 001	Sludge	Sludge from metal tumbler

Analysis Requested: TCLP Metals, Flashpoint, Corrosivity (pH), + Reactivity
(with Acid, Base, Water), Point Filter

Special Handling and/or Storage: _____

PART II: LABORATORY SECTION**

Received by: _____ Title: _____ Date: _____

Analysis Required: _____

- * Indicate whether sample is soil, sludge, etc.
 ** Use back of page for additional information relative to sample location.



**GREAT
LAKES
ANALYTICAL**

1380 Busch Parkway • Buffalo Grove, Illinois 60089

(708) 808-7766 FAX (708) 808-7772

Mostardi-Platt Associates, Inc.
945 Oaklawn Ave.
Elmhurst, IL 60126
Attention: Cheryl Smith

Client Project ID: 32809
Sample Descript: Water
Analysis for: Flash Point, Closed Cup(F)
First Sample #: 307-0407

Sampled: Jul 12, 1993
Received: Jul 13, 1993
Analyzed: Jul 19, 1993
Reported: Jul 20, 1993

LABORATORY ANALYSIS FOR: Flash Point, Closed Cup(F)

Sample Number	Sample Description	Sample Result
307-0407	32809-001	> 200
307-0408	32809-002	95

sludge from settling tank

← Raw Deburring Sludge (no
contaminants)

← "Acculcan" cleaning solvent

Red

Norman

*Rich - I need to
talk to you about
these results & sampling.*

Thanks

DTF

GREAT LAKES ANALYTICAL

[Signature]
Kevin W. Keeley
Laboratory Director

3070407.MOS <1>



1380 BUSCH PARKWAY
BUFFALO GROVE, ILLINOIS 60089-4505
(708) 808-7766 FAX (708) 808-7772

TAT: 5 DAY 4 DAY 3 DAY 2 DAY 1 DAY < 24 HR

DATE RESULTS NEEDED: 7/20/93

TEMPERATURE UPON RECEIPT: ON ICE

AIR BILL NO.

[illegible]

EXPERIMENTS:

Waste Solvent Handler Information

Solvent Waste Handler Information

Waste Handlers for Used Mineral Spirits

Langrebe Motor Transit (1980 to 1990)	USEPA ID # IND009842824 Valparaiso, IN	219-462-4181
Mr. Frank, Inc. (1990 to 1993)	USEPA ID # ILD984775049 Matteson, IL	708-481-5221
Hazchem Environmental (1993 to present)	USEPA ID # ILD984785238 Addison, IL USEPA ID # ILR000001388 (formerly) Lombard, IL	630-458-1910

Volume of Used Mineral Spirits Generated

prior to 1980	approximately 50 gallons per year
1980 to 1999	approximately 50-100 gallons per year
1999 to present	no longer generate used mineral spirits

- NOTES:
1. The approximate time period for which the waste handler provided removal services is indicated in parentheses under the waste handler name.
 2. The last known phone number for the waste handler is provided.
 3. Prior to 1993, used mineral spirits and used oils were placed into the same containers for disposal. Therefore, volumes on pre-1993 waste manifests in Exhibit I are in excess of those indicated above for used mineral spirits during that time period.

POTW Correspondence

DOWNERS GROVE SANITARY DISTRICT
PROHIBITED MATERIALS DISCHARGE REPORT
July 1 through December 31, 1998

copy
original
mailed
1-8-99

Company: NORWOOD MARKING SYSTEMS

Location: 2538 Wisconsin Downers Grove, IL 60515

This Report was completed by: Dennis J. Bark

Title: Safety Director Phone: 630 968 0696 ext 7034

Describe the occurrence of any discharges of materials prohibited from discharge to the sanitary sewer system. Include the date, time and type of materials discharged; the amount; who was notified at the time; how the spill was contained and cleaned up; and the method of disposal for the spilled materials. Please reference any reports filed with the District.

(Please attach additional sheets)

If no discharges occurred during the reporting period, please indicate that by checking the certification statement below:

- ♦ ☒ Based on my inquiry of the person or persons directly responsible for managing compliance with the accidental discharge reporting requirements, I certify that to the best of my knowledge and belief, no prohibited materials have been dumped or spilled into the wastewaters since filing the last Prohibited Materials Discharge Report. I further certify that this facility is implementing the Spill Containment and Control Plan submitted to the District.

The report must be signed by an authorized agent of the company named above:

Authorized Agent: Dennis J. Bark Title: Safety Director
(Please type or print name)

Signature: Dennis J. Bark Date: 01/07/99

DOWNERS GROVE SANITARY DISTRICT
Prohibited Materials Discharge Report
January 1 through June 30, 1997

Company Name: NORWOOD MARKING SYSTEMS

Address: 2538 WISCONSIN AVENUE

DOWNERS GROVE, ILLINOIS 60515

Report Completed By: DENNIS BOURK

Title: SAFETY DIRECTOR Phone: 630-968-0646

Describe the occurrence of any discharges of materials prohibited from discharge to the sanitary sewer system. Include the date, time type of material discharged, the volume and concentration; what authorities were notified of the discharge; what actions were taken to control and clean up the material; and what actions were taken to prevent a reoccurrence.

(Please attach additional sheets)

If no discharges occurred during the reporting period, please indicate that by checking the certification statement below.

 X Based on my inquiry of the person or persons directly responsible for managing compliance with the accidental spill disposal and reporting requirements, I certify that to the best of my knowledge and belief, no solvents or toxics have been dumped or spilled into the wastewaters since filing the last "Prohibited Materials Discharge Report". I further certify that this facility is implementing the Spill containment, or solvent management plan, submitted to the Downers Grove Sanitary District.

All reports must be signed by an Authorized Agent of the company named above:

Name of Authorized Agent: DENNIS BOURK
(Please type or print name)

Signature: _____

Title: SAFETY DIRECTOR Date: 8-12-97

DOWNERS GROVE SANITARY DISTRICT
Prohibited Materials Discharge Report
July 1 through December 31, 1994

Company Name: NORWOOD MARKING SYSTEMS

Address: 2538 Wisconsin Ave.

Downers Grove, IL 60515

Report Completed By: Larry J. Kollins/Dennis Bourk

Title: Plant Superintendent

Phone: 708-968-0646

Describe the occurrence of any discharges of materials prohibited from discharge to the sanitary sewer system. Include the date, time type of material discharged, the volume and concentration; what authorities were notified of the discharge; what actions were taken to control and clean up the material; and what actions were taken to prevent a reoccurrence.

(Please attach additional sheets)

If no discharges occurred during the reporting period, please indicate that by checking the certification statement below.

X Based on my inquiry of the person or persons directly responsible for managing compliance with the accidental spill disposal and reporting requirements, I certify that to the best of my knowledge and belief, no solvents or toxics have been dumped or spilled into the wastewaters since filing the last "Prohibited Materials Discharge Report". I further certify that this facility is implementing the Spill containment, or solvent management plan, submitted to the Downers Grove Sanitary District.

All reports must be signed by an Authorized Agent of the company named above:

Name of Authorized Agent: Larry J. Kollins/Dennis Bourk

(Please type or print name)

Signature: _____

Dennis Bourk S.D.

Title: Plant Superintendent /Safety Director

Date: 1-19-95

DOWNERS GROVE SANITARY DISTRICT
Prohibited Materials Discharge Report
July 1 through December 31, 1992

Company Name: NORWOOD MARKING SYSTEMS

Address: 2538 Wisconsin Ave.

Downers Grove IL 60515

Report Completed By: Larry J. Kollins

Title: Plant Manager Phone: (708) 968-0646

Describe the occurrence of any discharges of materials prohibited from discharge to the sanitary sewer system. Include the date, time type of material discharged, the volume and concentration; what authorities were notified of the discharge; what actions were taken to control and clean up the material; and what actions were taken to prevent a reoccurrence.

(Please attach additional sheets)

If no discharges occurred during the reporting period, please indicate that by checking the certification statement below.

X Based on my inquiry of the person or persons directly responsible for managing compliance with the accidental spill disposal and reporting requirements, I certify that to the best of my knowledge and belief, no solvents or toxics have been dumped or spilled into the wastewaters since filing the last "Prohibited Materials Discharge Report". I further certify that this facility is implementing the Spill containment, or solvent management plan, submitted to the Downers Grove Sanitary District.

All reports must be signed by an Authorized Agent of the company named above:

Name of Authorized Agent: Larry J. Kollins
(Please type or print name)

Signature: *Larry J. Kollins*

Title: Plant Manager Date: 1-12-93

DOWNERS GROVE SANITARY DISTRICT
Prohibited Materials Discharge Report
July 1 through December 31, 1992

Company Name: NORWOOD MARKING SYSTEMS

Address: 2538 Wisconsin Ave.
Downers Grove IL 60515

Report Completed By: Larry J. Kollins

Title: Plant Manager Phone: (708) 968-0646

Describe the occurrence of any discharges of materials prohibited from discharge to the sanitary sewer system. Include the date, time type of material discharged, the volume and concentration; what authorities were notified of the discharge; what actions were taken to control and clean up the material; and what actions were taken to prevent a recurrence.

(Please attach additional sheets)

If no discharges occurred during the reporting period, please indicate that by checking the certification statement below.

X Based on my inquiry of the person or persons directly responsible for managing compliance with the accidental spill disposal and reporting requirements, I certify that to the best of my knowledge and belief, no solvents or toxics have been dumped or spilled into the wastewaters since filing the last "Prohibited Materials Discharge Report". I further certify that this facility is implementing the Spill containment, or solvent management plan, submitted to the Downers Grove Sanitary District.

All reports must be signed by an Authorized Agent of the company named above:

Name of Authorized Agent: Larry J. Kollins
(Please type or print name)

Signature: *Larry J. Kollins*

Title: Plant Manager Date: 1-12-93



Marking & Equipment Co., Inc.

P.O. BOX 358
2538 WISCONSIN AVENUE
DOWNERS GROVE, IL 60515

TELEPHONE 312-968-0646
TWX 910-695-0111

July 17, 1985

Downers Grove Sanitary District
2710 Curtiss Street
Downers Grove IL 60515

Gentlemen:

Based on my inquiry of the person or persons directly responsible for managing compliance with the accidental spill disposal and reporting requirements, I certify that to the best of my knowledge and belief, no prohibited materials have been dumped into the sanitary wastewaters since filing the last Accidental Spill Disposal Report. I further certify that this facility is implementing the solvent management plan submitted to the District.

Larry J. Kollins
Plant Superintendent

LK:vme

Reference Documents



2538 Wisconsin Avenue
Downers Grove, IL 60515-4293
U.S.A.

Telephone 1-800-626-3464
1-630-968-0646
Fax 1-630-968-9447

January 24, 2002

Illinois Environmental Protection Agency
Bureau of Land (#24)
Solid Waste Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Dear Sir/Madam:

Attached please find the completed 3-page, 2001 Nonhazardous Special Waste Annual Report for Norwood Marking Systems, Inc.'s (Norwood) facility located at 2538 Wisconsin Avenue in Downers Grove, Illinois (Illinois Special Waste Generator ID Number: 0430305021). The facility is required to complete and submit this report, as required under the Illinois Environmental Protection Act 22.01 and the Illinois Pollution Control Board Rules, since it has shipped non-hazardous special waste out-of-state for treatment, storage, disposal, or recycling.

If you have questions regarding this submittal, please do not hesitate to contact me at 630-968-0646, or the report preparer, Claude E. Mays, III, Senior Project Manager for MOSTARDI PLATT ENVIRONMENTAL (MPE), at 630-993-2106.

Sincerely,

Norwood Marking Systems, Inc.

Robert Hitchcock
Operations Manager

RH/el



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

Illinois Nonhazardous Special Waste Annual Report Site Information Form

(This form must be completed for each site that submits an annual report)

Reporting Year: 2001

Site Information:

Site IEPA Identification Number: 0430305021

Site Name: Norwood Marking Systems, Inc.

Site Street Address: 2538 Wisconsin Avenue

Site City: Downers Grove

Site State: IL Site Zip Code: 60515 Site Telephone: 630-968-0646

Check one of the following, if applicable:

☐ Generator- No nonhazardous special waste was shipped to an out of state TSDR Facility in this reporting year.

☐ Facility TSDR- No nonhazardous special waste was received at this TSDR Facility in this reporting year.

Site Mailing Address Information:

(Complete the following information only if site mailing label is incorrect.)

Company: Telephone:

Contact Person:

Street Address: P.O. Box

City: State: Zip Code:

Annual Report Certification

I certify under penalty of law that I have examined and am familiar with the information submitted in this and any attached continuation sheets or other attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete, I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (print/type): Robert Hitchcock Telephone: 630-968-0646

Signature: *R. Hitchcock* Date: 1-24-02

This Agency is authorized to require this information under Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021. Disclosure of this information is required. Failure to do so may result in a civil penalty up to \$25,000 for each day the failure continued, a fine up to \$50,000 and imprisonment up to 5 years. This form has been approved by Forms Management Center.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

Illinois Generator Nonhazardous Special Waste 2001 Annual Report For Waste Shipped Out-Of-State

043 03050 21

NORWOOD MARKING EQUIPMENT
2538 WISCONSIN AVE
DOWNERS GROVE IL

60515

Page 2 of 3

Record Field	Management Code	Out-of-State TSDR Facility Name & Address (Address must match ID #)	TSDR Facility IEPA ID#	Waste Code	Quantity	UOM	Comments
A.	13	Pollution Control Industries of Indiana 4343 Kennedy Avenue East Chicago, IN 46312	9180890026	13	275	G	
B.	03	Pollution Control Industries of Indiana 4343 Kennedy Ave. East Chicago, IN 46312	9180890026	12	440	G	
C.							
D.							
E.							
F.							
G.							
H.							
I.							
J.							

GEORGE H. RYAN, GOVERNOR



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

2001 Illinois Nonhazardous Special Waste Annual Report Hauler Information

Page 3 of 3

Record Field	Uniform Hauler Permit ID Number	Hauler Name	Hauler Address, City, State and Zip Code	Comments
A.	484475/ ILD 984785238	Hazchem Environmental	115 W. National Avenue Addison, IL 60101	
B.	484475/ ILD 984785238	Hazchem Environmental	115 W. National Avenue Addison, IL 60101	
C.				
D.				
E.				
F.				
G.				



2538 Wisconsin Avenue
Downers Grove, IL 60515-4293
U.S.A.

Telephone 1-800-626-3464
1-630-968-0646
Fax 1-630-968-9447

January 24, 2001

Illinois Environmental Protection Agency
Bureau of Land (#24)
Solid Waste Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Dear Sir/Madam:

Attached please find the completed 3-page, 2001 Nonhazardous Special Waste Annual Report for Norwood Marking Systems, Inc.'s (Norwood) former facility located at 520 5th Avenue in Naperville, Illinois (Illinois Special Waste Generator ID Number: 0434675340). The facility is required to complete and submit this report, as required under the Illinois Environmental Protection Act 22.01 and the Illinois Pollution Control Board Rules, since it has shipped non-hazardous special waste out-of-state for treatment, storage, disposal, or recycling.

Please note that Norwood completely moved out of the above referenced location as of March 31, 2001, and this will be the last report submitted for this location. Further, Norwood submitted a May 1, 2001 letter to the Illinois Environmental Protection Agency (IEPA) Permits Section requesting that the following generator identification numbers be made inactive - U.S. EPA: ILR000077578 and IEPA: 0434675340. If IEPA's database still shows these numbers active, please inactivate them.

If you have questions regarding this submittal, please do not hesitate to contact me at 630-968-0646, or the report preparer, Claude E. Mays, III, Senior Project Manager for MOSTARDI PLATT ENVIRONMENTAL (MPE), at 630-993-2106.

Sincerely,

Norwood Marking Systems, Inc.

Robert Hitchcock
Operations Manager

RH/el



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

Illinois Nonhazardous Special Waste Annual Report Site Information Form

(This form must be completed for each site that submits an annual report)

Reporting Year: 2001

Site Information:

Site IEPA Identification Number: 0434675340

Site Name: Norwood Marking Systems, Inc.

Site Street Address: 520 West 5th Avenue

Site City: Naperville

Site State: IL Site Zip Code: 60565-2901 Site Telephone: -----

Check one of the following, if applicable:

☐ **Generator-** No nonhazardous special waste was shipped to an out of state TSDR Facility in this reporting year.

☐ **Facility TSDR-** No nonhazardous special waste was received at this TSDR Facility in this reporting year.

Site Mailing Address Information:

(Complete the following information only if site mailing label is incorrect.)

Company: _____ Telephone: _____

Contact Person: _____

Street Address: _____ P.O. Box _____

City: _____ State: _____ Zip Code: _____

Annual Report Certification

I certify under penalty of law that I have examined and am familiar with the information submitted in this and any attached continuation sheets or other attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete, I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (print/type): Robert Hitchcock Telephone: 630-968-0646

Signature: *Robert Hitchcock* Date: 1-24-02

This Agency is authorized to require this information under Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021. Disclosure of this information is required. Failure to do so may result in a civil penalty up to \$25,000 for each day the failure continued, a fine up to \$50,000 and imprisonment up to 5 years. This form has been approved by Forms Management Center.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

Illinois Generator Nonhazardous Special Waste 2001 Annual Report For Waste Shipped Out-Of-State

043 46753 40

NORWOOD MARKING SYSTEMS
520 W 5TH AVE
NAPERVILLE

IL
60563-2901

Page 2 of 3

Record Field	Management Code	Out-of-State TSDR Facility Name & Address (Address must match ID #)	TSDR Facility IEPA ID#	Waste Code	Quantity	UOM	Comments
A.	03	Pollution Control Industries of Indiana 4343 Kennedy Ave. East Chicago, IN 46312	9180890026	12	220	G	
B.	13	Pollution Control Industries of Indiana 4343 Kennedy Ave. East Chicago, IN 46312	9180890026	13	330	G	
C.							
D.							
E.							
F.							
G.							
H.							
I.							
J.							

GEORGE H. RYAN, GOVERNOR



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

2001 Illinois Nonhazardous Special Waste Annual Report Hauler Information

Page 3 of 3

Record Field	Uniform Hauler Permit ID Number	Hauler Name	Hauler Address, City, State and Zip Code	Comments
A.	484475/ ILD 984785238	Hazchem Environmental	115 W. National Avenue Addison, IL 60101	
B.	484475/ ILD 984785238	Hazchem Environmental	115 W. National Avenue Addison, IL 60101	
C.				
D.				
E.				
F.				
G.				

GEORGE H. RYAN, GOVERNOR

Mostardi-Platt Associates, Inc.
A Full-Service
Environmental Consulting
Company

945 Oaklawn Avenue
Elmhurst, Illinois 60126-1012
Phone 630-993-9000
Facsimile 630-993-8017

June 7, 2001

Ms. Elaine LaBuda
Norwood Marking Systems, Inc.
2538 Wisconsin Avenue
Downers Grove, Illinois 60515-4293



Dear Ms. LaBuda:

MOSTARDI-PLATT ASSOCIATES, INC. (Mostardi Platt) has reviewed the United States Department of Transportation (U.S. DOT) Hazardous Materials Registration Program requirements for the Norwood Marking Systems, Inc. facilities in Downers Grove and Frankfort, Illinois. At this time, Norwood Marking Systems, Inc. is not required to register with U.S. DOT as a person that offers any shipment of hazardous materials (including hazardous waste) that requires placarding for transportation (49 CFR Part 107, Subpart G – Registration of Persons Who Offer or Transport Hazardous Materials).

In addition, based on information provided by Norwood Marking Systems, Inc., these facilities do not offer hazardous waste for transportation since they are not hazardous waste generators. However, these facilities do offer hazardous materials that are typically combustible or flammable in nature for transportation in non-bulk packaging. As long as Norwood Marking Systems, Inc. keeps offering hazardous materials shipments in quantities of less than 1,000 pounds, registration is not required.

If you have any questions regarding this matter, please do not hesitate to call me at 630-993-2106.

Sincerely,

MOSTARDI-PLATT ASSOCIATES, INC.

Claude E. Mays III, CHMM, REP
Senior Project Manager

CEM/kmt



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

2001 Illinois Nonhazardous Special Waste Annual Report Hauler Information

Page 3 of 3

Record Field	Uniform Hauler Permit ID Number	Hauler Name	Hauler Address, City, State and Zip Code	Comments
A.	484475/ ILD 984785238	Hazchem Environmental	115 W. National Avenue Addison, IL 60101	
B.	484475/ ILD 984785238	Hazchem Environmental	115 W. National Avenue Addison, IL 60101	
C.				
D.				
E.				
F.				
G.				

Mostardi-Platt Associates, Inc.
A Full-Service
Environmental Consulting
Company

945 Oaklawn Avenue
Elmhurst, Illinois 60126-1012
Phone 630-993-9000
Facsimile 630-993-8017

June 7, 2001

Ms. Elaine LaBuda
Norwood Marking Systems, Inc.
2538 Wisconsin Avenue
Downers Grove, Illinois 60515-4293



Dear Ms. LaBuda:

MOSTARDI-PLATT ASSOCIATES, INC. (Mostardi Platt) has reviewed the United States Department of Transportation (U.S. DOT) Hazardous Materials Registration Program requirements for the Norwood Marking Systems, Inc. facilities in Downers Grove and Frankfort, Illinois. At this time, Norwood Marking Systems, Inc. is not required to register with U.S. DOT as a person that offers any shipment of hazardous materials (including hazardous waste) that requires placarding for transportation (49 CFR Part 107, Subpart G – Registration of Persons Who Offer or Transport Hazardous Materials).

In addition, based on information provided by Norwood Marking Systems, Inc., these facilities do not offer hazardous waste for transportation since they are not hazardous waste generators. However, these facilities do offer hazardous materials that are typically combustible or flammable in nature for transportation in non-bulk packaging. As long as Norwood Marking Systems, Inc. keeps offering hazardous materials shipments in quantities of less than 1,000 pounds, registration is not required.

If you have any questions regarding this matter, please do not hesitate to call me at 630-993-2106.

Sincerely,

MOSTARDI-PLATT ASSOCIATES, INC.

Claude E. Mays III, CHMM, REP
Senior Project Manager

CEM/kmt



2538 Wisconsin Avenue
Downers Grove, IL 60515-4293
U.S.A.

Telephone 1-800-626-3464
1-630-968-0646
Fax 1-630-968-9447

April 17, 2001

Illinois Environmental Protection Agency
Bureau of Land (#24)
Solid Waste Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Dear Sir/Madam:

Attached please find the completed, revised 3-page, 2000 Nonhazardous Special Waste Annual Report for Norwood Marking Systems, Inc.'s facility located at 2538 Wisconsin Avenue in Downers Grove, Illinois (Illinois Special Waste Generator ID Number: 0430305021). The facility is required to complete and submit this report, as required under the Illinois Environmental Protection Act 22.01 and the Illinois Pollution Control Board Rules, since it has shipped non-hazardous special waste out-of-state for treatment storage, disposal, or recycling. This revision submittal is due to a manifest not being accounted for in the first submittal.

If you have questions regarding this submittal, please do not hesitate to contact me at 630-968-0646, or the report preparer, Claude E. Mays, III, Senior Project Manager for MOSTARDI-PLATT ASSOCIATES, INC. (Mostardi-Platt), at 630-993-2106.

Sincerely,

Norwood Marking Systems, Inc.

Robert Hitchcock
Operations Manager

RH/el
enclosure

614-175 4/18/01 WT LTR LBS
PKG ID 4062335 SERVICE 1DA
OR:EL/RH
TRACKING# 126141750140623359

PUB PKG CHG \$ 13.50
DV \$ 0.00 COD \$ 0.00
DC \$ 0.00 CT \$ 0.00
AH \$ 0.00 SD \$ 0.00
HNDL \$ 0.00 SP \$ 0.00
NTFY \$ 0.00 HZMT \$ 0.00
TOTAL NET CUST CHG \$ 13.50
TOTAL PUB PKG CHG \$ 13.50



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

Illinois Nonhazardous Special Waste Annual Report Site Information Form

(This form must be completed for each site that submits an annual report)

Reporting Year: 2000

Site Information:

Site IEPA Identification Number: 043 03050 21 Revision 1

Site Name: Norwood Marking Systems, Inc.

Site Street Address: 2538 Wisconsin Avenue

Site City: Downers Grove

Site State: IL Site Zip Code: 60515 Site Telephone: 630-968-0646

Check one of the following, if applicable:

☐ Generator- No nonhazardous special waste was shipped to an out of state TSDR Facility in this reporting year.

☐ Facility TSDR- No nonhazardous special waste was received at this TSDR Facility in this reporting year.

Site Mailing Address Information:

(Complete the following information only if site mailing label is incorrect.)

Company: _____ Telephone: _____

Contact Person: _____

Street Address: _____ P.O. Box _____

City: _____ State: _____ Zip Code: _____

Annual Report Certification

I certify under penalty of law that I have examined and am familiar with the information submitted in this and any attached continuation sheets or other attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete, I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (print/type): Robert Hitchcock Telephone: 630-968-0646

Signature: *R. Hitchcock* Date: 4-17-01

This Agency is authorized to require this information under Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021. Disclosure of this information is required. Failure to do so may result in a civil penalty up to \$25,000 for each day the failure continued; a fine up to \$50,000 and imprisonment up to 5 years. This form has been approved by Forms Management Center.

IL 532-2615
LPC-578 Rev. 12/2000



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

**Illinois Generator Nonhazardous Special Waste
2000 Annual Report
For Waste Shipped Out-Of-State**

043 03050 21

NORWOOD MARKING EQUIPMENT
2538 WISCONSIN AVE
BOWNERS GROVE IL
60515

Revision 1

Page 2 of 3

Record Field	Management Code	Out-of-State TSDR Facility Name & Address (Address must match ID #)	TSDR Facility IEPA ID#	Waste Code	Quantity	UOM	Comments
A.	13	Pollution Control Industries of 4343 Kennedy Avenue East Chicago, Indiana 46312	IN 918 089 0026	13	100	G	
B.	03	Pollution Control Industries of 4343 Kennedy Avenue East Chicago, Indiana 46312	IN 9180890026	12	1.0	G	
C.	04	Pollution Control Industries of 4343 Kennedy Avenue East Chicago, Indiana 46312	IN 9180890026	15	0.24	2	
D.							
E.							
F.							
G.							
H.							
I.							
J.							



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

2000 Illinois Nonhazardous Special Waste Annual Report Hauler Information

Revision 1

Page 3 of 3

Record Field	IEPA Special Waste Hauler Permit or Uniform Hauler Permit ID Number	Hauler Name	Hauler Address, City, State and Zip Code	Comments
A.	484475	Hazchem Environmental	115 W. National Avenue Addison, IL 60101	
B.	027071704	Leader Industries, Inc.	284 W 1050 N Chesterton, IN 46304	
C.				
D.				
E.				
F.				
G.				
H.				

Mostardi Platt Associates, Inc.
A Full-Service
Environmental Consulting
Company

945 Oaklawn Avenue
Elmhurst, Illinois 60126-1012
Phone 630-993-9000
Facsimile 630-993-9017

January 18, 2001

Mr. Robert Hitchcock
Operations Manager
Norwood Marking Systems, Inc.
2538 Wisconsin Avenue
Downers Grove, Illinois 60515-4293



Dear Mr. Hitchcock:

Enclosed please find two (2) copies of the 3-page 2000 Nonhazardous Special Waste Annual Report for the Illinois Environmental Protection Agency (IEPA) prepared by MOSTARDI-PLATT ASSOCIATES, INC. (Mostardi Platt) for the Norwood Marking Systems, Inc. facility in Downers Grove, Illinois.

Please copy the enclosed letter of transmittal to the IEPA onto your corporate letterhead, and mail a signed copy of the letter with one (1) copy of the 2000 Nonhazardous Special Waste Annual Report to the IEPA. Please file the other copy on-site since it must be kept available for a minimum of three (3) years.

If you have any questions, please feel free to call me at 630-993-2141.

Sincerely,

MOSTARDI-PLATT ASSOCIATES, INC.

Claude E. Mays, III; CHMM, REP
Senior Project Manager

Enclosures



2538 Wisconsin Avenue
Downers Grove, IL 60515-4293
U.S.A.

January 22, 2001

Illinois Environmental Protection Agency
Bureau of Land (#24)
Solid Waste Section
1021 North Grand Avenue East
Post Office box 19276
Springfield, Illinois 62794-9276

Dear Sir/Madam:

Attached please find the completed 3-page, 2000 Non-hazardous Special Waste Annual Report for Norwood Marking Systems, Inc.'s facility located at 2538 Wisconsin Avenue in Downers Grove, Illinois (Illinois Special Waste Generator ID Number: 0430305021). The facility is required to complete and submit this report, as under the Illinois Environmental Protection Act 22.01 and the Illinois Pollution Control Board Rules, since it has shipped non-hazardous special waste out-of-state for treatment, storage, disposal, or recycling.

If you have questions regarding this submittal, please do not hesitate to contact me at 630-968-0646, or the report preparer, Claude E. Mays, III, Senior Project Manager for MOSTARDI-PLATT ASSOCIATES, INC. (Mostardi Platt), at 630-993-2106.

Sincerely,

Robert Hitchcock
Operations Manager

RH/el



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

Illinois Nonhazardous Special Waste Annual Report Site Information Form

(This form must be completed for each site that submits an annual report)

Reporting Year: 2000

Site Information:

Site IEPA Identification Number: 043 03050 21

Site Name: Norwood Marking Systems, Inc.

Site Street Address: 2538 Wisconsin Avenue

Site City: Downers Grove

Site State: IL Site Zip Code: 60515 Site Telephone: 630-968-0646

Check one of the following, if applicable:

☐ Generator- No nonhazardous special waste was shipped to an out of state TSDR Facility in this reporting year.

☐ Facility TSDR- No nonhazardous special waste was received at this TSDR Facility in this reporting year.

Site Mailing Address Information:

(Complete the following information only if site mailing label is incorrect.)

Company: _____ Telephone: _____

Contact Person: _____

Street Address: _____ P.O. Box _____

City: _____ State: _____ Zip Code: _____

Annual Report Certification

I certify under penalty of law that I have examined and am familiar with the information submitted in this and any attached continuation sheets or other attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete, I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (print/type): Robert Hitchcock Telephone: 630-968-0646

Signature: R. Hitchcock Date: 1-22-01

This Agency is authorized to require this information under Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021. Disclosure of this information is required. Failure to do so may result in a civil penalty up to \$25,000 for each day the failure continued, a fine up to \$50,000 and imprisonment up to 5 years. This form has been approved by Forms Management Center.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

Illinois Generator Nonhazardous Special Waste 2000 Annual Report For Waste Shipped Out-Of-State

043 03050 21

NORWOOD MARKING EQUIPMENT
2538 WISCONSIN AVE
DOWNERS GROVE IL
60515

Page 2 of 3

Record Field	Management Code	Out-of-State TSDR Facility Name & Address (Address must match ID #)	TSDR Facility IEPA ID#	Waste Code	Quantity	UOM	Comments
A.	13	Pollution Control Industries of 4343 Kennedy Avenue East Chicago, Indiana 46312	IN 918 089 0026	13	100	G	
B.	03	Pollution Control Industries of 4343 Kennedy Avenue East Chicago, Indiana 46312	IN 9180890026	12	100	G	
C.							
D.							
E.							
F.							
G.							
H.							
I.							
J.							



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

2000 Illinois Nonhazardous Special Waste Annual Report Hauler Information

Page 3 of 3

Record Field	IEPA Special Waste Hauler Permit or Uniform Hauler Permit ID Number	Hauler Name	Hauler Address, City, State and Zip Code	Comments
A.	484475	Hazchem Environmental	115 W. National Avenue Addison, IL 60101	
B.	027071704	Leader Industries, Inc.	284 W 1050 N Chesterton, IN 46304	
C.				
D.				
E.				
F.				
G.				
H.				

A Full-Service
Environmental Consulting
Company

945 Oaklawn Avenue
Elmhurst, Illinois 60126-1012
Phone 630-993-9000
Facsimile 630-993-9017

January 26, 2000

Mr. Robert Hitchcock
Operations Manager
Norwood Marking Systems, Inc.
2538 Wisconsin Avenue
Downers Grove, Illinois 60515



Dear Mr. Hitchcock:

Enclosed please find the 1999 Illinois Nonhazardous Special Waste Annual Report prepared for the Norwood Marking Systems, Inc. facility located at 2538 Wisconsin Avenue in Downers Grove, Illinois, pursuant to Section 809.501(h), Title 35 Illinois Administrative Code. The nonhazardous special waste reporting requirement applies to any facility located in Illinois that generates nonhazardous special waste that is taken out of state to a facility for treatment, storage, disposal, or recycling. Please sign the original and make a copy of it for your records. Then mail the original to the following address by no later than February 1, 2000:

Illinois Environmental Protection Agency
Bureau of Land (#24)
Solid Waste Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions please call me at 630-993-2126.

Sincerely,

MOSTARDI-PLATT ASSOCIATES, INC.

Joel Lueking
Staff Scientist

JL/avb

Enclosures



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

Illinois Nonhazardous Special Waste Annual Report
Site Information Form

(This form must be completed for each site that submits an annual report)

Reporting Year: 1999

Site Information:

Site IEPA Identification Number: 0430305021

Site Name: Norwood Marking Systems, Inc.

Site Street Address: 2538 Wisconsin Avenue

Site City: Downers Grove

Site State: IL Site Zip Code: 60515 Site Telephone: 630-968-0646

Check one of the following, if applicable:

☐ Generator- No nonhazardous special waste was shipped to an out of state TSDR Facility in this reporting year.

☐ Facility TSDR- No nonhazardous special waste was received at this TSDR Facility in this reporting year.

Site Mailing Address Information:

(Complete the following information only if site mailing label is incorrect.)

Company: _____ Telephone: _____

Contact Person: _____

Street Address: _____ P.O. Box _____

City: _____ State: _____ Zip Code: _____

Annual Report Certification

I certify under penalty of law that I have examined and am familiar with the information submitted in this and any attached continuation sheets or other attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (print/type): Robert Hitchcock Telephone: 630-968-0646

Signature: *R. Hitchcock* Date: 1-27-00

This Agency is authorized to require this information under Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021. Disclosure of this information is required. Failure to do so may result in a civil penalty up to \$25,000 for each day the failure continued, a fine up to \$50,000 and imprisonment up to 5 years. This form has been approved by Forms Management Center.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. Box 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

Illinois Generator Nonhazardous Special Waste 1999 Annual Report For Waste Shipped Out-Of-State

Norwood Marking Systems, Inc.
2538 Wisconsin Avenue
Downers Grove, Illinois 60515

Record Field	Management Code	Out-of-State TSDR Facility Name & Address (Address must match ID Number)	TSD IEPA ID Number	Waste Code	Quantity	Unit of Measure	Comments
A.	06	Pollution Control Ind.-IN 4343 Kennedy Avenue East Chicago, IN 46601	IL9180890026	13	250	1	
B.	09	Same as above	Same as above	12	200	1	
C.							
D.							
E.							
F.							
G.							
H.							
I.							
J.							



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

1999 Illinois Nonhazardous Special Waste Annual Report Hauler Information

Record Field	IEPA Special Waste Hauler Permit or Uniform Hauler Permit ID Number	Hauler Name	Hauler Address, City, State and Zip Code	Comments
A.	UPM0484475IL	HazChem Environmental	1115 National Avenue Addison, IL 60101	
B.	UPM0350461IL	North Branch Environmental	7 North 458 Garden Avenue Roselle, IL 60172	
C.				
D.				
E.				
F.				
G.				
H.				
I.				



5-034-01

State Form LPC 62 8/81

IL532-0610

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD984848564	Manifest Document No. 83853	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address NORWOOD MARKETING 2538 WISCONSIN DOWNERS GROVE IL 60515			A. Illinois Manifest Document Number IL09857341 FEE PAID IF APPLICABLE		
4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 630-768-0646			B. Generator's IL ID Number 0430805021		
5. Transporter 1 Company Name SAFETY-KLEEN SYSTEMS, INC		6. US EPA ID Number SCRO00075150		C. Transporter's ID Number UPW1512881L	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (847) 468-6600	
9. Designated Facility Name and Site Address SAFETY-KLEEN SYSTEMS, INC 633 E 138TH ST DOLTON, IL 60419			10. US EPA ID Number ILD980613913		E. Transporter's ID Number
					F. Transporter's Phone ()
					G. Facility's IL ID Number 0310690006
					H. Facility's Phone (708) 225-8100
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
a. HAZARDOUS WASTE, LIQUID, N.O.S. 9 NA3082 PG III (D039)(ERG#171) AQUEOUS PARTS WASHER SOLUTION (8.3#/GAL)			002	0.0027	G
b.					
c.					
d.					
J. Additional Description for Materials Listed Above			K. Handling Codes for Wastes Listed Above In Item #14 M124		
15. Special Handling Instructions and Additional Information 0148 101441666 0019383853 0002576794 26 SK AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIER, AS NECESSARY. *EMERGENCY RESP#800-468-1760 24HR					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Dennis Bourk		Signature <i>Dennis Bourk</i>		Date 11/28/01	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature <i>Brian Wells</i>		Date 11/28/01	
Printed/Typed Name Brian Wells		Signature <i>Brian T. Wells</i>		Date 11/28/01	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date	
Printed/Typed Name		Signature		Date	
19. Discrepancy Indication Space					
20. Facility Owner/Operator Certification of receipt of hazardous materials covered by this manifest except as noted in year 15.					
Printed/Typed Name Dennis I. Bourk		Signature <i>Dennis I. Bourk</i>		Date 11/29/01	

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR



STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81

IL532-0810

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 8-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD984848564	Manifest Document No. 10101	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address Norwood Marking Systems 2538 Wisconsin Avenue Downers Grove Illinois 60415			Location if Different Per Kate Koenig		A. Illinois Manifest Document Number IL 10077126 FEE PAID IF APPLICABLE
4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* 630-458-1910					B. Generator's IL ID Number NA
5. Transporter 1 Company Name HAZCHEM ENVIRONMENTAL			6. US EPA ID Number ILD984785238		C. Transporter's ID Number 484475
7. Transporter 2 Company Name			8. US EPA ID Number		D. Transporter's Phone (630) 458-1910
9. Designated Facility Name and Site Address Pollution Control Industries of Indiana 4343 KENNEDY AVENUE EAST CHICAGO INDIANA 46312			10. US EPA ID Number ILD000646943		E. Transporter's ID Number
					F. Transporter's Phone (630) 529-0240
					G. Facility's IL ID Number NA
					H. Facility's Phone (219) 397-3951
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
a. Non Regulated Material Not Regulated By D.O.T. (OIL)			001 DM	900.55	G
b. Non Regulated Material Not Regulated By D.O.T. (COOLANT)			002 DM	991.10	G
c.					
d.					
J. Additional Description for Materials Listed Above 11a) PCI - 162845 10 x 55 11b) PCI - 162846 2 x 55 cy 10/10			K. Handling Codes for Wastes Listed Above In Item #14 		
15. Special Handling Instructions and Additional Information 630-668-0646 Generator Phone					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Dennis Powell			Signature 		Date Month Day Year 10 10 01
17. Transporter 1 Acknowledgement of Receipt of Materials			Printed/Typed Name CHRIS JOHNSON		Signature Ch. Johnson
18. Transporter 2 Acknowledgement of Receipt of Materials			Printed/Typed Name		Signature
19. Discrepancy Indication Space Kate Koenig gave permission to correct manifest Per EPA ID ILD984848564 pm					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.			Printed/Typed Name Susan Smurdon		Signature Susan Smurdon
					Date Month Day Year 10 22 01



PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD984848564	Manifest Document No. 78499	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address NORWOOD MARKETING 2538 WISCONSIN DOWNERS GROVE IL 60515			A. Illinois Manifest Document Number IL 9891525 FEE PAID IF APPLICABLE		
4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 630 968-0646			B. Generator's IL ID Number 0430305021		
5. Transporter 1 Company Name SAFETY-KLEEN SYSTEMS, INC			C. Transporter's ID Number UPW151288IL		
6. US EPA ID Number SCRO00075150			D. Transporter's Phone (647) 468-6600		
7. Transporter 2 Company Name			E. Transporter's ID Number		
8. US EPA ID Number			F. Transporter's Phone ()		
9. Designated Facility Name and Site Address 00654 SAFETY-KLEEN SYSTEMS, INC. 633 E 138TH ST DOLTON, IL 60419			G. Facility's IL ID Number 0310690006		
10. US EPA ID Number ILD980613913			H. Facility's Phone (708) 225-8100		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type	13. Total Quantity	14. Unit WVVol	I. Waste No.
a. HAZARDOUS WASTE, LIQUID, N.O.S. 9 NA3082 PG III (D039)(ERG#171) AQUEOUS PARTS WASHER SOLUTION (8.3#/GAL)		602 DM	60.034	G	EPA HW Number 0039
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number
J. Additional Description for Materials Listed Above		K. Handling Codes for Wastes Listed Above in item #14 M124			
15. Special Handling Instructions and Additional Information 0018873133 MFCT R/T#101311503 0002-5767-14 EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR. SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIER AS NECESSARY. SRDOT# A: 10070 B: C: D:					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Dennis Bourk		Signature Dennis Bourk		Date Month 03 Day 10 Year 2001	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Brian Wells		Signature Brian T. Wells		Date Month 03 Day 10 Year 2001	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date Month Day Year	
19. Discrepancy Indication Space Corrected dates on lines 16+17 to actual pickup date. (5)					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.					Date
Printed/Typed Name M Maciel		Signature M Maciel		Date Month 03 Day 10 Year 2001	

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR



STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-8276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

5-034-01

State Form LPC 62 8/81

IL532-0610

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS
WASTE MANIFEST1. Generator's US EPA ID No.
ILD984848564Manifest
Document No.
305292. Page 1
of 1Information in the shaded areas is not
required by Federal law, but is required by
Illinois law.

3. Generator's Name and Mailing Address

NORWOOD MARKETING
2538 WISCONSIN
DOWNERS GROVE

Location If Different

IL 60515

4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 630 968-0646

5. Transporter 1 Company Name

SAFETY-KLEEN SYSTEMS, INC

6.

US EPA ID Number

SCR000075150

7. Transporter 2 Company Name

8.

US EPA ID Number

9. Designated Facility Name and Site Address

SAFETY-KLEEN SYSTEMS, INC.
633 E 138TH ST
DOLTON, IL 60419

10.

US EPA ID Number

ILD980613913

A. Illinois Manifest Document Number

IL09997988 FEE PAID
IF APPLICABLE

B. Generator's IL

ID Number 0430305021

C. Transporter's
ID Number

UPW151288IL

D. Transporter's Phone (847) 468-6560

E. Transporter's
ID Number

F. Transporter's Phone ()

G. Facility's IL 0310690006
ID Number

H. Facility's Phone (708) 225-8100

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers
No. Type13. Total
Quantity14. Unit
Wt/Vol

I. Waste No.

a. HAZARDOUS WASTE, LIQUID, N.O.S.
9 NA3082 PG III (D039)(ERG#171)
AQUEOUS PARTS WASHER SOLUTION (8.3#/GAL)

002

DM

00034

G

EPA HW Number
D039

b.

EPA HW Number

c.

EPA HW Number

d.

EPA HW Number

J. Additional Description for Materials Listed Above

K. Handling Codes for Wastes Listed Above
in Item #14

M124

15. Special Handling Instructions and Additional Information

0018330529 MFST R/T#101005329 0002-5767-94
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY.
SKDOT# A: 10070 B: C: D:16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by
proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway
according to applicable international and national government regulations.If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to
be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present
and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and
select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Date

Month Day Year
07 31 07

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year
07 31 07

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Date

Printed/Typed Name

Signature

Month Day Year
08 01 01This Agency is authorized to require, pursuant to Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide
this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000
per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR



STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

5-034-01

State Form LPC 62 8/81

IL532-0610

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD984848564		2. Page 1 of 1		Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address NORWOOD MARKETING 2538 WISCONSIN DOWNERS GROVE IL 60515				Location If Different		A. Illinois Manifest Document Number IL 9820885	
4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS 630 968-0646				6. US EPA ID Number SCR000075150		B. Generator's ID Number 041005020	
5. Transporter 1 Company Name SAFETY-KLEEN SYSTEMS, INC.				7. Transporter 2 Company Name		C. Transporter's ID Number UPH1512502L	
9. Designated Facility Name and Site Address SAFETY-KLEEN SYSTEMS, INC. 633 E 138TH ST DOLTON, IL 60419				10. US EPA ID Number ILD980613913		D. Transporter's Phone 847 466-6560	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No. Type		13. Total Quantity	
a. HAZARDOUS WASTE, LIQUID, N.O.S. 9 NA3082 PG III (D039)(ERG#171) AQUEOUS PARTS WASHER SOLUTION (8.3#/GAL)				102 DM		00.030 G	
b.						EPA HW Number D039	
c.						EPA HW Number	
d.						EPA HW Number	
J. Additional Description for Materials Listed Above				K. Handling Codes for Wastes Listed Above in Item #14 M124			
15. Special Handling Instructions and Additional Information 0017766196 MFST R/T#100767755 0002-5767-94 EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR. SK CORP AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY. SKDOT# A: 10070 B: C: D:							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Dennis Bourk				Signature Dennis Bourk		Date 06/04/01	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature [Signature]		Date 06/04/01	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name V. White				Signature V. White		Date 06/04/01	

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.



PLEASE TYPE

(Form designed for use on 8 1/2 (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address Norwood Marking Systems 2538 Wisconsin Avenue Downers Grove Illinois		Location If Different			
4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 630-468-1910					
5. Transporter 1 Company Name HazChem Environmental	6. US EPA ID Number ILD984785238				
7. Transporter 2 Company Name	8. US EPA ID Number				
9. Designated Facility Name and Site Address Pollution Control Industries of Indiana 4343 Kennedy Avenue East Chicago Indiana 46312	10. US EPA ID Number IND000846943				
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers	13. Total Quantity	14. Unit Wt/Vol	
a. Non Regulated Material Not Hazardous By D.O.T. (Tumbling Mud)		No.	Type		
b.					
c.					
d.					
15. Special Handling Instructions and Additional Information 630-668-0646 Generator Phone Certificate of Destruction Required					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Bradley S. Watts		Signature <i>Bradley S. Watts</i>		Date Month Day Year 12 21 00	
17. Transporter 1 Acknowledgement of Receipt of Materials				Date	
Printed/Typed Name CHRIS JOHNSON		Signature <i>Ch. John</i>		Month Day Year 12 21 00	
18. Transporter 2 Acknowledgement of Receipt of Materials				Date	
Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.					
Printed/Typed Name		Signature		Date Month Day Year	

This Agency is authorized to require, pursuant to Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 or day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 6. GENERATOR'S COPY

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

State Form LPC 62 8/81

IL532-0610

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. N/A		Manifest Document No. 70146		2. Page 1 of 1		Information in the shaded areas is not required by Federal law, but is required by Illinois law.					
Generator's Name and Mailing Address ODD MARKING SYSTEMS WISCONSIN AVENUE WARRERS GROVE ILLINOIS 60415 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS 630-458-1510						Location If Different							
3. Transporter 1 Company Name HazChem Environmental						6. US EPA ID Number ILE984785236							
7. Transporter 2 Company Name North Branch Environmental						8. US EPA ID Number ILD981002074							
9. Designated Facility Name and Site Address Pollution Control Industries of Indiana 4343 Kennedy Avenue East Chicago Indiana 46312						10. US EPA ID Number IND000018943							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		1. Waste No.	
a. Non Regulated Material Not Regulated By D.O.T. (OIL)						0051100250						EPA HW Number None 000002	
b. Non Regulated Material Not Regulated By D.O.T. (COOLANT)						0041100250						EPA HW Number None 000002	
c.												EPA HW Number	
d.												EPA HW Number	
J. Additional Description for Materials Listed Above 11a) PCI 102845 X55 11b) PCI 102845 X55 11c) 11d)						K. Handling Codes for Wastes Listed Above in Item #14							
15. Special Handling Instructions and Additional Information Certificate of Destruction Required Generator Phone 630-988-0648													
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.													
Printed/Typed Name Bradley S. Watts						Signature Bradley S. Watts						Date Month Day Year 05/18/97	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name RALPH ESMATE						Signature Ralph Esmate						Date Month Day Year 05/18/97	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name						Signature						Date Month Day Year	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.												Date	
Printed/Typed Name						Signature						Month Day Year	

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

In case of a spill call the Illinois Office of Emergency Response at 217/782-7800 and the National Response Center at 800/424-9300.



PLEASE TYPE

(Form designed for use on elite (12 pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM MANIFEST		1. Generator's US EPA ID No. ILD984848564	Manifest Document No. 08242	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address Norwood Marking Systems, 2538 Wisconsin Downers Grove, IL 60415			Location If Different		A. Illinois Manifest Document Number IL 7508242 FEE PAID IF APPLICABLE	
4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 630-916-1697					B. Illinois Generator's ID 0430305021	
5. Transporter 1 Company Name HazChem Environmental Corporation		6. US EPA ID Number ILR 000 001 388		C. Illinois Transporter's ID 3209		
7. Transporter 2 Company Name North Branch Environmental		8. US EPA ID Number ILD 981 002 074		D. 630916-1697 Transporter's Phone		
9. Designated Facility Name and Site Address Environmental Services of America-IN, Inc. 604 South Scott Street South Bend, IN 46601		10. US EPA ID Number IND 980 590 947		E. Illinois Transporter's ID 2558		
				F. 630529-0240 Transporter's Phone		
				G. Illinois Facility's ID 6161410004		
				H. Facility's Phone 219-234-0441		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Non-Hazardous Non-DOT regulated materials (oil)			004	DMC001715	G	EPA HW Number XX 000000 Authorization Number
b.						EPA HW Number XX Authorization Number
c.						EPA HW Number XX Authorization Number
d.						EPA HW Number XX Authorization Number
J. Additional Description for Materials Listed Above			K. Handling Codes for Wastes Listed Above in Item #14			
15. Special Handling Instructions and Additional Information 11a) F1928-01: 4x55 FLD *Generator requests certificate of destruction						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, and disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name Dennis J Bourk			Signature Dennis J Bourk		Date Month Day Year 11 11 98	
17. Transporter 1 Acknowledgement of Receipt of Materials			Printed/Typed Name Bruce Sroka		Signature Bruce Sroka	
18. Transporter 2 Acknowledgement of Receipt of Materials			Printed/Typed Name TERRY PETER		Signature Terry Peter	
19. Discrepancy Indication/Space			Date Month Day Year 10/12/98			
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.			Printed/Typed Name Jon L Bankert		Signature Jon L Bankert	
					Date Month Day Year 10/12/98	

This Agency is authorized to require, pursuant to Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.



STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

PLEASE TYPE

(Form designed for use on elite (12 pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039, Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD984848564		Manifest Document No. 27211		2. Page 1 of 1		Information in the shaded areas is not required by Federal law, but is required by Illinois law.			
3. Generator's Name and Mailing Address Location If Different Lorwood Marking Systems, 2503 Wisconsin Downers Grove, IL 60415						A. Illinois Manifest Document Number IL 7127211 FEE PAID IF APPLICABLE					
4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 530-916-1697						B. Illinois Generator's ID 0430265021					
5. Transporter 1 Company Name EasChem Environmental Corp			6. US EPA ID Number ILR 800 001 358			C. Illinois Transporter's ID 3403			D. 630916-1697 Transporter's Phone		
7. Transporter 2 Company Name North Branch Environmental			8. US EPA ID Number ILD 981 002 074			E. Illinois Transporter's ID 2558			F. 630529-0240 Transporter's Phone		
9. Designated Facility Name and Site Address Environmental Services of America-IL, Inc. 304 South Scott Street South Bend, IN 46601						10. US EPA ID Number IND 980 590 947			G. Illinois Facility's ID 1001410004		
						H. Facility's Phone 219-234-0441					
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
a. Non-Hazardous Non-DOT regulated materials (oil)						002 DM 00100				I. Waste No. EPA HW Number XX 00100000 Authorization Number	
b.										EPA HW Number XX Authorization Number	
c.										EPA HW Number XX Authorization Number	
d.										EPA HW Number XX Authorization Number	
J. Additional Description for Materials Listed Above						K. Handling Codes for Wastes Listed Above In Item #14					
15. Special Handling Instructions and Additional Information 11a) 921-01: 255 NLD #18-19 *Generator requests certificate of destruction											
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, and disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.											
Printed/Typed Name Dennis T. Hunt						Signature Dennis T. Hunt			Date Month Day Year 05 1 997		
17. Transporter 1 Acknowledgement of Receipt of Materials						Printed/Typed Name Dennis T. Hunt			Signature Dennis T. Hunt		
18. Transporter 2 Acknowledgement of Receipt of Materials						Printed/Typed Name Tim O'Callaghan			Signature Tim O'Callaghan		
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.						Printed/Typed Name Chelle D. Knax			Signature Chelle D. Knax		
									Date Month Day Year 06 03 97		

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.



PLEASE TYPE

(Form designed for use on elite (12 pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039, Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD984848564	Manifest Document No. 127120	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address Norwood Marking Systems, 2538 Wisconsin Downers Grove, IL 60415			A. Illinois Manifest Document Number IL 7127120 FEE PAID IF APPLICABLE		
4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 630-916-1697			B. Illinois Generator's ID 0430305021		
5. Transporter 1 Company Name HazChem Environmental Corp		6. US EPA ID Number ILR 000 001 388		C. Illinois Transporter's ID 3209	
7. Transporter 2 Company Name North Branch Environmental		8. US EPA ID Number ILD 981 002 074		D. 630916-1697 Transporter's Phone 2558	
9. Designated Facility Name and Site Address Environmental Services of America-IN, Inc. 604 South Scott Street South Bend, IN 46601			E. Illinois Transporter's ID F. 630529-0240 Transporter's Phone		
10. US EPA ID Number IND 980 590 947			G. Illinois Facility's ID H. Facility's Phone 219-234-0441		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
a. Non-Hazardous Non-DOT regulated materials (oil)			0.02	100.0	G
b.					
c.					
d.					
J. Additional Description for Materials Listed Above			K. Handling Codes for Wastes Listed Above In Item #14		
15. Special Handling Instructions and Additional Information 11a) F1928-01: 2x55 FLD #88-89 \$ *Generator requests certificate of destruction					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, and disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Dennis J Bourk		Signature Dennis J Bourk		Date 01/21/97	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name RALPH CASARITO		Signature Ralph Casarito		Date 01/21/97	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name TERRY POTTER		Signature Terry Potter		Date 01/23/97	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name Terry Potter		Signature Terry Potter		Date 01/23/97	

This Agency is authorized to require, pursuant to Illinois Revised Statutes, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.



PLEASE PRINT OR TYPE

(Form designed for use on elite (12-pitch typewriter).)

Form approved. OMB No. 2050-0039. Expires 9-30-94

**UNIFORM HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA No.

IL2 984 842 564 . . .

Manifest
Document No.

2. Page 1

Information in the shaded areas is
not required by Federal law, but
items D, F, H, I and K are required
by State law.

3. Generator's Name and Mailing Address

2534 Wisconsin

Downers Grove IL 60413

Downers Grove Environmental Services

A. State Manifest Document Number

INA 1032250

4. Generator's Phone ()

708-983-9446

B. State Generator's ID

IL-00000001

5. Transporter 1 Company Name

Downers Grove Environmental Corp

6. US EPA ID Number

IL2 984 842 564 . . .

C. State Transporter's ID

IL-1234

7. Transporter 2 Company Name

Southlake Environmental Services

8. US EPA ID Number

IL2 984 842 564 . . .

D. Transporter's Phone

708-915-1697

E. State Transporter's ID

IL-1234

9. Designated Facility Name and Site Address

Environmental Services of America-Inc

604 S Scott St

South Bend IN 46601

10. US EPA ID Number

IL2 984 842 564 . . .

G. State Facility's ID

9131415004

H. Facility's Phone

717-654-8444

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. 15. Waste Flammable Liquids, n.o.s., J, UN1993, PGII
(Petroleum Distillates) 0001

12. Containers
No. Type

13. Total
Quantity

14. Unit
Wt/Vol.

15. Waste No.

.001

.25

.0000005

b. Non-Hazardous Waste Liquid

.001

.25

.0000003

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

In Emergency Contact 708-915-1697

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Date

Month

Day

Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month

Day

Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month

Day

Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.

Printed/Typed Name

Signature

Date

Month

Day

Year

INA1032250

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD 984 848 364		Manifest Document No. 146125		2. Page 1 of 1		Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
Generator's Name and Mailing Address Horwood Marking Systems 2538 Wisconsin Ave Downers Grove IL 60415				Location If Different attn Paul Grzeka		A. Illinois Manifest Document Number 146125 FEE PAID IF APPLICABLE			
24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS 708-916-1697				B. Illinois Generator's ID No. 146125		C. Illinois Transporter's ID No. 3209			
Transporter 1 Company Name HasChem Environmental Corp				6. US EPA ID Number ILD 984 845 065		D. Illinois Transporter's Phone 708-916-1697			
Transporter 2 Company Name Southlake Environmental Services				8. US EPA ID Number IND 984 867 390		E. Illinois Transporter's ID No. 2598			
Designated Facility Name and Site Address Environmental Services of America-Inc 504 S Scott St South Bend IN 46601				10. US EPA ID Number IND 980 590 947		F. Illinois Facility's ID No. 9181410004			
1. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) Non-Hazardous Oil				12. Containers No. 005 Type DM		13. Total Quantity 0.000296		14. Unit Wt/Vol G	
								Waste No. XXXXXX	
								EPA HW Number XXXXXX	
								Authorization Number XXXXXX	
								EPA HW Number XXXXXX	
								Authorization Number XXXXXX	
								EPA HW Number XXXXXX	
								Authorization Number XXXXXX	
J. Additional Description for Materials Listed Above				K. Handling Codes for Wastes Listed Above In Item 14 G = Gallons Y = Cubic Yards					
15. Special Handling Instructions and Additional Information Generator Phone#708-968-0646									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name PAUL GRZEKA				Signature <i>Paul Grzeka</i>				Date Month Day Year 12 15 95	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature <i>Bruce Scola</i>				Date Month Day Year 02 02 95	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature <i>[Signature]</i>				Date Month Day Year 12 15 95	
19. Discrepancy Indication Space <div style="text-align: right; font-size: 1.2em; font-weight: bold;">REC'D FEB 15 1995</div>									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.								Date Month Day Year 12 15 95	
Printed/Typed Name				Signature					

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 6. GENERATOR'S COPY

In case of a spill call the Illinois Office of Emergency Response at 217 / 782-7860 and the National Response Center at 800 / 424-8802 or 202 / 426-2675.



PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039, Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD 984 848 564	Manifest Document No. 106001	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address Norwood Marking Systems 2538 Wisconsin Ave		Location If Different attn Dennis Bourk Downers Grove IL 60515			
4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS 708-916-1697					
5. Transporter 1 Company Name HazChem Environmental Corp		6. US EPA ID Number ILD 984 845 065			
7. Transporter 2 Company Name Chemical Services		8. US EPA ID Number ILD 980 701 106			
9. Designated Facility Name and Site Address Industrial Fuel and Resources 604 S Scott St South Bend In 46625		10. US EPA ID Number IND 980 590 947		11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	
a. Non-Hazardous Waste Oil		12. Containers No. Type B.S. 882 DM		13. Total Quantity B.S. 00000110	14. Unit Wt/Vol G
b. Non-Hazardous Waste Water		0004 DM		00000220	G
c.					
d.					
Additional Description of Materials Listed Above GA-13062 GA-13067		K. Handling Codes for Wastes Listed Above G = Gallons Y = Cubic Yards T-50 T-16			
15. Special Handling Instructions and Additional Information Generator Phone#708-968-0646					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name PAUL GRZEZA		Signature Paul Grzeza		Date 8/2/93	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name BRUCE SPOKA		Signature Bruce Spoka		Date 8/2/93	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name KEN KUNIGS		Signature Ken Kunigs		Date 8/2/93	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.					
Printed/Typed Name Charles White		Signature Charles White		Date 8/2/93	



**MICHIGAN DEPARTMENT
OF NATURAL RESOURCES**

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Act 64, P.A. 1979, as amended and Act 136, P.A. 1969.

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

Please print or type.

Form Approved. OMB No. 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. IL1D9810111061000012		Manifest Document No. of 1		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address NEEDLE OD MAKING, SYSTEMS 2538 WISCONSIN AVE DOONERS GROVE IL 60515		A. State Manifest Document Number MI 2446597		B. State Generator's ID		C. State Transporter's ID 334ACT 136		D. Transporter's Phone 708-481-5221	
4. Generator's Phone (708) 768-1146		6. US EPA ID Number IL1D9810111061000012		8. US EPA ID Number MI1D9810111061000012		E. State Transporter's ID		F. Transporter's Phone	
5. Transporter 1 Company Name MR FRANK INC.		7. Transporter 2 Company Name		9. Designated Facility Name and Site Address JELD CHEM PROCESSING 515 LYCASIE ST DETROIT MI 48214		10. US EPA ID Number MI1D9810111061000012		G. State Facility's ID	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). a. X 1015 LITRE FLAMMABLE LIQUID N.O.S. (ALIPHATIC FLAMMABLE LIQUID UN-1993 (D001))		12. Containers No. Type		13. Total Quantity		14. Unit M/Vol		Waste No. NH	
		007 D14010385 G		D001				H	
J. Additional Descriptions for Materials Listed Above KEQUAL # W24725 WASTE SOLVENTS 1014		K. Handling Codes for Wastes Listed Above		a/ S/R		b/ /		c/ /	
				d/ /					
15. Special Handling Instructions and Additional Information 24 HOUR EMERGENCY PHONE # 300-6716-1414									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name PAUL GRZECA		Signature Paul Grzecka		Date 11/10/91					
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name JACK MCCLVERTY		Signature Jack McClervy		Date 11/10/91			
18. Transporter 2 Acknowledgement or Receipt of Materials		Printed/Typed Name JACK		Signature Jack		Date 11/10/91			
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.									
Printed/Typed Name JACK		Signature Jack		Date 11/10/91					

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

ATT ☒ DIS ☐ REJ ☒ PR ☐

Form Approved L OMB No. 2050-0039 Expires 9-30-81

GENERATOR 2nd COPY

PR 8
Bay

**MICHIGAN DEPARTMENT
OF NATURAL RESOURCES**

DO NOT WRITE IN THIS SPACE

ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Act 64, P.A. 1979, as amended and Act 136, P.A. 1969.

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

JAN 25 1991

Please print or type

Form Approved OMB No. 2050-0039 Expires 9-30-91

**UNIFORM HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

Generator's Name and Mailing Address

WORLDWIDE MARKING SYSTEMS
1555 WISCONSIN AVE
DOWNERS GROVE, IL 60515

A. State Manifest Document Number

MI 2194785

Generator's Phone

(708) 968-0646

B. State Generator's ID

MI 2194785

Transporter 1 Company Name

MR. FRANK INC

US EPA ID Number

34D984775949

C. State Transporter's ID

339AC913

Transporter 2 Company Name

WASTE MANAGEMENT

US EPA ID Number

MD780615298

D. Transporter's Phone

(708) 481-5222

E. State Transporter's ID

339AC913

Designated Facility Name and Site Address

PEAK CATALYTIC PROCESSING
15 LYCASTE ST
DETROIT, MI 48214

F. Transporter's Phone

(708) 481-5222

G. State Facility's ID

MI 2194785

H. Facility's Phone

(708) 481-5222

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER)

12. Containers

13. Total Quantity

14. Unit

1. Waste

No. N/H

HM ☒ FLAMMABLE LIQUID N.C.S.

No. Type

Quantity

Unit

Waste

No. N/H

FLAMMABLE (ALIPHATIC HYDROCARBONS)

100

400

330

1

0001

UN-1993

100

400

330

1

0001

WASTE FLAMMABLE LIQUID N.C.S.

100

400

330

1

0001

FLAMMABLE (ALIPHATIC HYDROCARBONS)

100

400

330

1

0001

UN-1993

100

400

330

1

0001

WASTE FLAMMABLE LIQUID N.C.S.

100

400

330

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0001

FLAMMABLE (ALIPHATIC HYDROCARBONS)

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330

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UN-1993

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WASTE FLAMMABLE LIQUID N.C.S.

100

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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UN-1993

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WASTE FLAMMABLE LIQUID N.C.S.

100

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330

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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330

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UN-1993

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WASTE FLAMMABLE LIQUID N.C.S.

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400

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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UN-1993

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WASTE FLAMMABLE LIQUID N.C.S.

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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UN-1993

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WASTE FLAMMABLE LIQUID N.C.S.

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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WASTE FLAMMABLE LIQUID N.C.S.

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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WASTE FLAMMABLE LIQUID N.C.S.

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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WASTE FLAMMABLE LIQUID N.C.S.

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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UN-1993

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WASTE FLAMMABLE LIQUID N.C.S.

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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UN-1993

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WASTE FLAMMABLE LIQUID N.C.S.

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FLAMMABLE (ALIPHATIC HYDROCARBONS)

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UN-1993

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WASTE FLAMMABLE LIQUID N.C.S.

100

400

330

1

0001

FLAMMABLE (ALIPHATIC HYDROCARBONS)

100

400

330

1



PLEASE PRINT OR TYPE

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No

Manifest
Document No

2. Page 1

Information in the shaded areas is
not required by Federal law, but
items D, F, H and I are required by
State law.

3. Generator's Name and Mailing Address

IND 98070110400002
NORWOOD MARKING EQUIPMENT CO
2538 WISCONSIN AVE
DOWNERS GROVE, IL 60515

State Manifest Document Number

INA 0317927

B. State Generator's ID

4. Generator's Phone (312) 968-0646

5. Transporter 1 Company Name

LANDGREBE MOTOR TRANSIT

6. Use EPA ID Number

IND-009-8-42824

C. State Transporter's ID

1875

D. Transporter's Phone

219-462-4181

9. Designated Facility Name and Site Address

AMERICAN CHEMICAL SERVICE
410 S. COLFAX AVE
GRIFFITH, IN 46319-0190

10. Use EPA ID Number

IND-016-36-0265

G. State Facility's ID

219-924-4370

H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

FLAMMABLE LIQUID N.O.S.
FLAMMABLE
UN-1993

12. Containers

No. Type

13. Total Quantity

10.1.0 D 100.5.5.0

14. Unit

WT/Vol.

15. Waste No

1 D001

J. Additional Descriptions for Materials Listed Above

WASTE SOLVENTS & OIL

K. Handling Codes for Wastes Listed Above

1 = GALLONS

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Printed/Typed Name

Larry J. Kollins

Signature

Larry J. Kollins

Month Day Year
08 30 89

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

STEVEN WYPYSZCZAK

Signature

Steven P. Wypyszczak

Month Day Year
08 30 89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year
.

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted Item 19

Printed/Typed Name

W. J. KOLLINS

Signature

W. J. Kollins

Month Day Year
8 31 89



Please print or type.

(Form designed for use on ekte (12-pitch) typewriter)

EPA Form 8700-22 (3-84)

Form Approved OMB No. 2000-040-1 Expires 7-31

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address NORWOOD MARKING EQUIPMENT 2538 WISCONSIN AVE CO. DOWNERS GROVE, IL 60515		6. US EPA ID Number IND009842824		Illinois Manifest Document Number 1240957	
4. Generator's Phone (312) 968-0646		8. US EPA ID Number		Illinois Generator's ID 04303000211	
5. Transporter 1 Company Name LANDGREBE MOTOR TRANSIT		10. US EPA ID Number IND016360265		Illinois Transporter's ID 187 D. 219-462-4181 Transporter's Phone	
7. Transporter 2 Company Name		13. Total Quantity		Illinois Transporter's ID 918087000 H. Facility's Phone 219-924-4370	
9. Designated Facility Name and Site Address AMERICAN CHEMICAL SERVICE 420 S. COLFAX AVE GRIFFITH, IN 46319		14. Unit Wt/Vol		L Waste No.	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type		EPA HW Number 200 Authorization Number 9131218	
a. FLAMMABLE LIQUID N.O.S. IGNITABLE UN1993		8 DM		EPA HW Number Authorization Number	
b.				EPA HW Number Authorization Number	
c.				EPA HW Number Authorization Number	
d.				EPA HW Number Authorization Number	
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above In Item #14: 1 = Gallons 2 = Cubic Yards		RECEIVED JUN 18 1985	
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations, and Illinois regulations.					
Printed/Typed Name Larry J. Kollins		Signature <i>Larry J. Kollins</i>		Date 6/18	
17. Transporter 1 Acknowledgement of Receipt of Materials		Date			
Printed/Typed Name MITCH MULLINS Landgrebe Motor		Signature <i>Mitch S. Mullins</i>		Month Day Y 6/18	
18. Transporter 2 Acknowledgement or Receipt of Materials		Date			
Printed/Typed Name		Signature		Month Day Y	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		Date			
Printed/Typed Name FRANK PRICE		Signature <i>Frank Price</i>		Month Day Y 6/18	

ILLINOIS: 217 / 782-3637

24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS

OUTSIDE ILLINOIS: 800 / 424-8802 or 202 / 426-2

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 FACILITY PART - 4 TRANSPORTER PART - 5 IEPA PART - 6 GENERATOR

REV. 5-85 GENERATOR COPY - PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED
This Agency is authorized to require, pursuant to Illinois Revised Statutes, 1983, Chapter 111 1/2, Section 21, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator of not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.